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ABSTRACT

This report describes activities and achievements of a project that examined state policies linking new accountability demands with improvements in college teaching and learning. Major activities included: (1) meetings and national forums to explore state and public concerns about the quality and results of undergraduate education; (2) two commissioned papers and 10 case studies on state policy initiatives supporting improvements in teaching and learning through the development of performance indicators; and (3) wide dissemination of the project's findings and continued involvement of the Education Commission of the States (ECS) in the development of performance indicators for higher education. The state-level case studies provide in-depth examinations of formulation, planning, implementation, and reviews of policies and practices related to the assessment of education effectiveness in Colorado, Florida, Illinois, Kentucky, New York-SUNY (State University of New York), South Carolina, Tennessee, Texas, Virginia, and Wisconsin. After a project overview, individual sections of the report describe the project's purposes, background and origins, activities, evaluation, and results. Attachments include a brochure about ECS, the case study letter and list of contacts, the interview format, and the seminar letter and roster of participants. Also attached is the project's major product, a sourcebook on state-level performance indicators titled "Charting Higher Education Accountability," (Sandra S. Ruppert, Ed.) which contains the full case studies plus two essays, "Effectiveness in Undergraduate Education: An Analysis of State Quality Indicators" (Richard C. Richardson, Jr.) and "Developing Statewide Performance Indicators for Higher Education: Policy Themes and Variations" (Peter T. Ewell). (DB)

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The New Accountability: Policies To Improve Teaching and Learning

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Education Commission of the States
707 17th Street, Suite 2700
Denver, CO 80202-3427

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The New Accountability: Policies
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(8/94 departure from ECS)

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PROJECT SUMMARY

The New Accountability: Policies to Improve Teaching and Learning

College-level "student assessment" and "institutional accountability" for undergraduate education outcomes developed along parallel tracks throughout the 1980s. A convergence of interest in student learning and institutional performance became more apparent after 1990 and was captured by the phrase the "new accountability." States, in particular, became more interested in the "returns on their investment" in undergraduate education raising questions such as how these could be defined more clearly, what policies supported improvement in college teaching and learning, and how progress (and comparative results) could be monitored across institutions. This project achieved significant results in several areas, including:

- meetings and national forums to explore the state and public concerns about the quality and results of undergraduate education,
- commissioned papers and case studies on state policy initiatives to support improvements in teaching and learning through the development of performance indicators, and
- wide dissemination of the project's findings combined with continued ECS involvement in the development of performance indicators for higher education.

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Project Products: *Charting Higher Education Accountability: A Sourcebook on State-Level Performance Indicators*

EXECUTIVE SUMMARY

The New Accountability:
Policies to Improve Teaching and Learning

Education Commission of the States
707 17th Street, Suite 2700
Denver, CO 80202-3427

ECS Contact: Charles S. Lenth, 303-299-3667
Project Director: Sandra Ruppert (8/94 Departure from ECS)

PROJECT OVERVIEW

This project developed from prior efforts by the Education Commission of the States (ECS) to analyze and improve state policies for student assessment and public accountability, and from the organization's continuing involvement with state political and higher education leadership. Through the **New Accountability: Policies to Improve Teaching and Learning**, ECS sought **to provide public policymakers with new approaches to address the dual purposes of (1) determining if students collectively are developing the skills, knowledge and underlying values that contribute to meeting the public goals of higher education; and (2) triggering the institutional improvements in teaching and learning necessary to meet these goals more effectively.**

Project activities and results included: meetings and national forums to explore the state and public concerns about the quality of undergraduate education; commissioned papers and 10 case studies on state policy initiatives to support improvements in teaching and learning through the development of performance indicators; and wide dissemination of the project's key report, *Charting Higher Education Accountability: A Sourcebook on State-Level Performance Indicators*, combined with continued ECS involvement in the development of performance indicators for higher education.

PURPOSES

During the 1980s, the emphasis in state assessment policies was on institutional improvement, with accountability viewed more as a "by-product" of these improvements. In ECS's 50-state survey conducted in 1989, for example, the majority of 40 states with assessment policies in place indicated that institutional self-improvement, not accountability, was the primary purpose for these policies. By 1990, however, states were becoming more insistent in using both assessment and accountability as a means to enhance the educational effectiveness of public colleges and universities.

The phrase "new accountability" described the gradual shift in public policy purposes to link institutional accountability more closely to demonstrated improvements in teaching and learning incorporating student learning outcomes into a broader set of concerns about higher education's quality, effectiveness and productivity. Although the immediate causes varied from state to state, greater accountability was being driven as well by decreased state resources for higher education, rising costs, and growing demands for access.

Many states joined in the effort to develop common measures for assessing and reporting the performance of colleges and universities. By mid-1994, approximately one-third of states had some form of "performance indicators" in place, with the vast majority developed and implemented in the previous three years.

Within this changing context, the project had three related purposes: (1) to analyze and help states think through the design and implementation of policies that relate student assessment to institutional accountability; (2) to relate assessment and accountability policies to other areas and purposes of state higher education policy, such as academic planning, finance and governance; and (3) to host forums and produce printed materials useful to all states in dealing with the linking of assessment and accountability.

BACKGROUND AND ORIGINS AT ECS

In 1985, the ECS publication, *Transforming the State Role in Undergraduate Education*, recommended that higher education report on the extent to which it meets state goals for undergraduate education. Subsequent national surveys of state assessment initiatives by ECS led to the publication, *Assessing College Outcomes - What State Leaders Need to Know*, which provided guidance about using assessment policy to benefit both students and states.

The "new accountability" project built directly on this past work. Since the primary constituents of ECS include governors, legislative leaders and their senior policy aides, state higher education executive officers, leaders of campuses and governing bodies, and others, ECS brought to this project the experience and capacity to bring relevant stakeholders together to discuss common problems across the states, draw on existing research and practices in the area of assessment and accountability, and relate assessment and accountability to K-12 education concerns as well as the broader ECS agenda encompassing system change.

PROJECT DESCRIPTION

The project began with a series of dialogues to (1) examine the issues of institutional quality and effectiveness and discuss practices related to good undergraduate education, (2) examine the evidence or information that would indicate if conditions and practices related to high-quality undergraduate education exist on a campus, and (3) analyze the input, process or outcome indicators that also would be helpful for institutions to improve student learning.

A seven-member planning group was formed to assist in guiding and evaluating the project. Two papers were commissioned to examine and help states develop conceptual frameworks for the development of performance indicators, and two regional meetings were held to debate and refine these ideas. ECS commissioned an additional working document to provide a "common language" for discussing performance indicators. "Pointing the Way: Indicators as Policy Tools in Higher Education," prepared by Peter Ewell and Dennis Jones of NCHEMS, describes indicator systems and how they work, and provides a set of policy-level questions for reviewing the soundness of any particular indicator proposal.

The project also included in-depth examination of 10 state-level case studies (Colorado, Florida, Illinois, Kentucky, New York-SUNY, South Carolina, Tennessee, Texas, Virginia and Wisconsin) developed to analyze the prevailing state practices and experiences. The case studies, based on the interviews and materials provided by the state agencies, provide history of the formulation, planning, implementation, and review of policies and practices related to the assessment of education effectiveness. ECS also hosted a seminar on "Indicators of Quality and Accountability for Higher

Education Systems" for representatives from the 10 case-study states in conjunction with the ECS National Forum and Annual Meeting.

The project concluded with the publication of *Charting Higher Education Accountability: A Sourcebook on State-Level Performance Indicators,* which analyzes how performance measures or indicators were developed, and for what purposes the results are being used.

EVALUATION/PROJECT RESULTS

This project has produced visible and demonstrable results from the activities outlined above. The advisory group meetings and regional forums, which were central to shaping the course of this project, served as mechanisms for interim evaluation and course correction. Although, no formal evaluation of the separate activities was undertaken, periodic feedback served an important role in formative assessment and evaluation. In addition, state higher education agencies were repeatedly contacted to evaluate our interpretation of developments in their state and provide valuable feedback.

An important indicator of this project's results is the widespread use of the materials produced. Participants "took home what they learned" in order to shape and redirect some of their own actions. Copies of *Charting Higher Education Accountability* have been sent to all state higher education agencies and other interested parties; numerous statements have been received about its value and usefulness along with numerous requests for additional copies. Several requests also have been received from faculty members in graduate higher education programs for multiple copies to use in teaching courses on state policy. Findings from this project also have been presented at national and state-level meetings. Additional presentations and short articles in widely-distributed ECS publications (e.g., *State Leader*) are planned for the near future.

Finally, the positive evaluation and results of this project convinced ECS to undertake an additional summary report. Scheduled for publication in November, *Charting Higher Education Accountability: The Roots and Realities of State-Level Performance Indicators* will be aimed at governors and legislators, legislative and executive assistants, state higher education leadership and others in policymaking positions, and will summarize and set forth the principal findings.

SUMMARY AND CONCLUSIONS

This project has been successful in meeting several important objectives and contributing to the continuing development of accountability policies and practices in many settings. Specifically, we explored and analyzed the complexities of student assessment and institutional accountability policies at the state level; we worked with states to relate assessment and accountability to other areas of state policy, including academic planning, finance and governance; and we organized numerous meetings, made presentations and produced materials that extended the reach of this project to many states, organizations and institutions.

Interest in the issues of the quality and performance of colleges and universities is continuing to grow. ECS will continue to be an active partner with states in articulating public expectations for higher education more clearly and developing indicator systems that monitor progress in achieving these results.

EDUCATION COMMISSION OF THE STATES

The New Accountability:
Policies to Improve Teaching and Learning

A Final Report Submitted to the
Fund for the Improvement of Postsecondary Education

PROJECT OVERVIEW

This project developed from ECS's prior work with respect to state policies for student assessment and public accountability, and from the organization's direct involvement with state political and higher education leadership. Drawing from previous work, including the ECS publications, *Transforming the State Role in Undergraduate Education* and *Assessing College Outcomes - What State Leaders Need to Know*, this project examined the convergence of interest in student assessment and institutional accountability through regional and national meetings, analytic papers, and case studies of 10 states' development of higher education performance indicators.

Over the course of this project, the focus was both broadened and sharpened — broadened in the recognition that neither assessment nor accountability can be viewed in isolation from the other or from the changing and diverse social and economic contexts of higher education; and sharpened to focus on the central importance of how we define and report on quality and performance in higher education as potentially powerful forces in shaping state policy and, in turn, higher education.

The final project report is the most concrete manifestation of these efforts. *Charting Higher Education Accountability: A Sourcebook on State-Level Performance Indicators* includes two analytic papers on the development and use of performance indicators — "Effectiveness in Undergraduate Education: An Analysis of State Quality Indicators," by Richard C. Richardson, Jr. and "Developing Statewide Performance Indicators for Higher Education: Policy Themes and Variations," by Peter T. Ewell. These papers provided direction both for this project and for many states developing their own form of state "report card" or other monitoring procedure.

In addition, the sourcebook contains the state case studies tracking the development of performance indicators within 10 diverse settings. It discloses how these new accountability policies connect with other areas of state higher education policy and how each state evaluates the results of these efforts. Finally, this major project publication includes an interpretive essay, "Pointing the Way: Indicators as Policy Tools in Higher Education," by Peter T. Ewell and Dennis P. Jones, that will be helpful to states and other organizations in addressing the needs for more flexible and effective relationships between state governments and our colleges and universities. ECS will, in the near future, summarize and disseminate the key findings from this project to a wider audience through a "policy guide" to be distributed to governors, state legislators, institutional leaders and other interested parties, and through articles in ECS communication vehicles such as the *State Leader*.

PURPOSES

As initially conceived, the **New Accountability: Policies to Improve Teaching and Learning** was undertaken as a project of the Education Commission of the States (ECS) **to provide public policymakers with new approaches to address the dual purposes of (1) determining if students collectively are developing the skills, knowledge and underlying values that contribute to meeting the public goals of higher education; and (2) triggering the institutional improvements in teaching and learning necessary to meet these goals more effectively.**

When the preliminary proposal was submitted to FIPSE in late 1990, it was clear that states were becoming more insistent in using assessment as a tool to gauge the educational effectiveness of public colleges and universities and as a means to improve teaching and learning. At that time, the emphasis in state assessment policies was on institutional improvement, with accountability viewed more as a "by-product." According to ECS's 50-state survey conducted in 1989, for example, the majority of the 40 states with assessment policies in place indicated that institutional self-improvement, not accountability, was the primary purpose for assessment.

The phrase "new accountability" (coined by one of the key consultants on the project, Peter Ewell), described a gradual shift in public policy purposes to link institutional accountability more closely to demonstrated improvements in teaching and learning. Concern was being expressed by Ewell and other thoughtful observers that if ways were not found to address issues related to both accountability and improvement, "the movement to assess student learning, left to progress somewhat independently at state and institutional levels, runs the risk of developing at cross purposes with the need for accountability."

While campus-based assessment led to some demonstrated improvements in teaching and learning at the level of the classroom or department, the results of assessment were neither as far-reaching nor as deep as policymakers had hoped. Institutional assessment had only limited success in impacting the way colleges and universities set priorities for their undergraduate teaching mission. Moreover, answers were yet to be provided to the broader state and public questions about higher education's escalating costs and the "return on investment." Additional questions about "what college graduates know and are able to do" were not directly addressed — at least not on a collective, statewide basis — through the focus on institution-based assessment.

Consequently, public officials increasingly incorporated their concerns for student learning outcomes into a broader set of issues about higher education's accountability for quality, effectiveness and productivity. This move toward greater accountability was being driven as well by decreased state resources for higher education, rising costs and growing demands for access. Although the immediate causes varied from state to state, policymakers began to look seriously at using state-level accountability measures to guide state planning and budgetary decisions and to monitor the "public investment" in higher education.

Over the course of this project, and in consultation with FIPSE staff, the purposes of this project were modified to reflect and contribute directly to this evolving debate over assessment and accountability. This resulted in three categories of project goals and activities:

1. To analyze and help states think through the design and implementation of policies that relate student assessment to institutional accountability;
2. To relate assessment and accountability policies to other areas and purposes of state higher education policy, such as academic planning, finance and governance; and

3. To host forums and produce printed materials useful to all states in dealing with the linking of assessment and accountability.

During the course of this project, many states joined in the effort to develop common measures for colleges and universities to assess and report their performance. Approximately one-third of states now have in place some form of "performance indicators," with most of them developed and implemented within the last three years. In most cases, indicators are published in a higher education annual report or "report card," which allows for institutional comparisons and provides a readily understandable format for a broad audience. In this changing context, the project provided an important opportunity to describe and analyze prevailing state practices, and to help shape the emerging policies on higher education accountability and institutional improvement.

BACKGROUND AND ORIGINS AT ECS

ECS has a long history of involvement with state higher education assessment and accountability policy. In 1985 ECS published *Transforming the State Role in Undergraduate Education*, which, among other things, recommended that (1) a state's system of higher education be monitored to examine the extent to which it meets state goals for undergraduate education, and (2) the system report its results periodically. Beginning in 1986, ECS in conjunction with the American Association for Higher Education and the State Higher Education Executive Officers, undertook periodic national surveys of state assessment initiatives. In 1989 the second such survey, part of a FIPSE project to help further the national dialogue on higher education assessment, culminated in the publication, *Assessing College Outcomes - What State Leaders Need to Know*, which provided guidance on a number of basic questions about using assessment policy to benefit both students and the state.

The "new accountability" project built directly on this past work. ECS's early interest in assessment initiatives reflects the fact that its members and constituencies are drawn from both the academic and public policy communities. Founded in 1965, the primary constituents of ECS are governors, legislative leaders and their senior policy aides, chief state school officers, state higher education executive officers and their senior policy associates, members of state education boards, leaders of local schools, campuses and governing bodies, and others appointed by governors as ECS commissioners. (See attachment A for a summary of ECS organizational structure, purposes and networks.)

ECS brought to this project the experience and capacity to:

- bring a cross-section of relevant stakeholders together to discuss common themes and problems across the states;
- draw on existing research and practices in the area of assessment, and our organizational ties to individuals and organizations to carry forward these activities; and
- relate the debate about assessment and accountability to K-12 and other higher education concerns as well as to the broader ECS agenda encompassing system change.

Based on ECS's previous efforts to assist state policymakers in these areas, this project sought to identify and analyze the array of performance-based indicators currently in use or being developed at the state level. Second, we sought to examine how that array could be used by states in determining the effectiveness of institutions at providing a quality undergraduate education and in spurring improvements in teaching and learning. Third, we sought to synthesize that information into new approaches to help shape more effective state policies for undergraduate education that include indicators of student learning outcomes.

PROJECT DESCRIPTION

The project involved the following activities, many of which were part of the original project planning and others which reflected the changing state policy context.

1. Establishing a Dialogue on Indicators of Institutional Quality and Effectiveness

In Chicago on April 5, 1992, ECS convened a technical group comprised of Peter Ewell and Dennis Jones (National Center for Higher Education Management Systems [NCHEMS]), Theodore Marchese (American Association for Higher Education [AAHE]), Zelda Gamson (University of Massachusetts), and Michael Nettles and Marvin Peterson (University of Michigan) to discuss the assessment of campus conditions and practices related to good undergraduate education.

In a discussion moderated by Kay McClenney, vice president of ECS, the group was asked to deliberate these questions: What evidence or information would tell you if conditions and practices related to good undergraduate education exist on a campus (e.g., how could you tell if active learning was occurring or not)? Could this information be translated into input, process or outcome indicators that also would be helpful for institutions to improve student learning? The objective was not necessarily to reach a consensus on either the conditions or the indicators but rather to get some of the best thinking about this topic on the table.

2. Forming a Project Planning and Advisory Group

A seven-member planning group was formed to bring together representatives of higher education and policymakers to assist in developing a strategic project plan. The group included: Sandra Ruppert (project director, ECS), Joni Finney (ECS), Patrick Callan (California Higher Education Policy Study Center), Peter Ewell and Dennis Jones, Michael Nettles, and Richard C. Richardson Jr. (Arizona State University [ASU]). The planning group also met in Chicago on April 6, 1992, to review a proposed work plan and make suggestions about specific activities.

Together, the April 5 and April 6 meetings were very helpful for thinking about how to move forward on this project. Results of those meetings were instrumental in developing a revised work plan and a comprehensive strategy for addressing project objectives.

3. Developing a Strategic Work Plan for Assessing System-Level Performance

The work plan developed in April 1992 included the following components:

- *Developing a conceptual framework for assessing system-level performance as it pertains to undergraduate teaching and learning.*

  In order to report on the performance of higher education, a conceptual "model" of the enterprise and the environment within which it functions was needed as a starting point. We envisioned that the conceptual framework(s) would evolve through a series of draft models incorporating multiple perspectives on the issue.

- *Testing and refining ideas about system-level performance and its implications for state policy by stimulating dialogue among educators and policymakers.*

Our plans called for engaging in an iterative process to develop a conceptual framework for system-level performance. Ideas contained in draft framework(s) would set the context for debate among educators and state policymakers in rethinking how problems related to accountability and improvement are defined and how alternative solutions are envisioned. We planned a series of regional and statewide meetings to convene state- and system-level leaders and institutional researchers and administrators involved in assessment issues.

- *Assisting state policymakers in advancing an agenda for system-level quality which incorporates educational indicators for institutional accountability and improvement.* The conceptual frameworks and other commissioned papers, were intended to encourage states and institutions to engage in "an educational partnership" around a shared concept of educational quality. The project would provide state policymakers with a set of recommendations for the application and use of performance indicators useful for both accountability and improvement purposes.

4. Developing Draft Conceptual Frameworks

ECS contracted with Peter Ewell and Dennis Jones (NCHEMS) and Richard C. Richardson Jr. (ASU) to draft the conceptual frameworks for discussion. The consultants were selected because of their distinct — and complementary — work related to system-level quality. Previous work by Ewell/Jones emphasized constructing indicators around the current condition of and relationship among (a) students, (b) institutions (and "other providers" of postsecondary instruction), and (c) society at large (including employers, agencies, and the public generally). The perspective concentrated on indicating the elements of "good practice" in undergraduate instruction.

Richardson's view of quality was tied to higher education's ability to accommodate the growing diversity that will characterize America's college-going population in the next quarter-century. Access and quality were seen as inseparable. His work emphasized teaching and support strategies for promoting comparable achievement among a diverse student body.

5. Organizing Regional Forums

Two regional meetings were held to debate and refine the ideas contained in the Ewell/Jones and Richardson draft frameworks. The first meeting was June 22, 1992, in

Miami Beach, Florida, scheduled to coincide with the AAHE Conference on Assessment in Higher Education in order to draw on the expertise of educators and institutional researchers attending the conference.

A second meeting with the same format, but with emphasis on the system or state policy perspective, took place on August 5, 1992, in Cincinnati, Ohio, in conjunction with the ECS National Forum and Annual Meeting. Invited participants included system- or state-level leaders interested in enhancing system-level quality and in using educational indicators for measuring performance.

Elements of the framework and questions addressed at both forums included the following:

- *Criteria that define system- or state-level quality* — What are the public interests of higher education such as access and equity? To what extent are concepts of quality shaped by current economic and social conditions and how have they changed over time? What are the skills, knowledge and personal attributes that all college graduates should hold in common? Are principles of quality management from business and industry applicable to higher education systems?
- *Conditions for good undergraduate education* — What key characteristics of good educational practice, based on educational research, directly relate both to enhanced learning and student satisfaction? What are the common themes and areas of consensus on conditions and practices? How do state policies influence those conditions?
- *Indicators that provide evidence of those conditions* — What is the array of quantitative and qualitative measures that provide evidence for any designated condition of "good practice"? Could certain indicators be meaningfully summarized into an "Index of Leading Educational Indicators" that report on the condition of a state's higher education system? How should states use indicators to assess system-level quality and to spur institutional improvements in teaching and learning? How available or accessible are these data? What is the feasibility for collecting these indicators?

To facilitate discussion of these issues, ECS commissioned a working document intended to provide a "common language" for discussing performance indicators. "Pointing the Way: Indicators as Policy Tools in Higher Education" was prepared by Peter Ewell and Dennis Jones of NCHEMS. The paper defined indicator systems and described how they work, and it provided a set of policy-level questions for reviewing the soundness of any particular indicator proposal. The paper was used as a discussion piece for the participants at the regional dialogues, and later revised for inclusion in the final project publication.

6. Analyzing Policy Development Through 10 Case Studies

Following the regional forums, the planning and advisory group met in Denver to discuss the outcomes of the forums and advise ECS staff on next steps. Attending the September 24, 1992, meeting were: Pat Callan, Peter Ewell, Joni Finney (formerly with ECS, then with the California Higher Education Policy Center), Dennis Jones, Charles Lenth (then with the State Higher Education Executive Officers, currently with ECS), Dewayne Matthews (Western Interstate Commission for Higher Education [WICHE]), and Richard Richardson. The meeting was facilitated by Sandra Ruppert, ECS/FIPSE project director.

The meeting was pivotal in terms of reaching several conclusions about the development and use of performance indicators. Indicators were already becoming an increasingly accepted policy tool, although there was considerable misunderstanding about the use of indicators as a "scorecard," and there appeared to be no clear state strategies to develop and use indicators to achieve performance improvements. The consensus of the planning group, based on recommendations from participants at the forums, was that the project should "move beyond dialogue" and examine in depth the public policy environment surrounding the design and use of indicators at the state level.

As a result the work plan was modified to incorporate the development of state-level case studies that would interpret prevailing state practices and experiences. The case studies were designed to assist in understanding the context within which state policymakers address accountability and assessment, while the conceptual frameworks were used to test ideas about the state policymaking process.

In early December 1992, letters were sent to the state higher education executive officers in 10 states selected as case-study states. The 10 states (Colorado, Florida, Illinois, Kentucky, New York-SUNY, South Carolina, Tennessee, Texas, Virginia and Wisconsin) were selected for the study because some form of qualitative or quantitative performance measures were currently used or being developed to assess student learning outcomes and/or institutional effectiveness. (See attachment B for copy of letter describing study and list of state contacts.) In January, the initial letters were followed up by telephone interviews with the state officials or their designees. (See attachment C for interview format and contact list.)

The written case studies were based on the interviews and materials provided by the state agencies. Their purpose was to construct a state history of the formulation, planning, implementation, and review of policies and practices related to the assessment of education effectiveness. A format for preparing them was developed in collaboration with project consultants, Peter Ewell and Richard Richardson. The case studies were written by Ewell, Richardson, Ruppert and Gordon Van de Water (of the Denver-based consulting firm of Augenblick, Van de Water and Meyers).

7. Organizing a Seminar at the ECS National Forum and Annual Meeting

ECS hosted a seminar on "Indicators of Quality and Accountability for Higher Education Systems" for representatives from the 10 case-study states to discuss current and emerging state policies and practices related to the definition, assessment and reporting of higher education quality issues. It was held on July 14, 1993, in Pittsburgh in conjunction with the ECS National Forum and Annual Meeting. (See attachment D for letter of invitation and participant roster.) Four draft case studies (Colorado, Illinois, South Carolina and Tennessee) were sent to meeting participants in advance of the seminar in order to get participants' reactions before ECS proceeded with revising them and completing the remaining six. Subsequently, drafts of all case studies were sent to the appropriate state higher education agency for feedback and review before finalizing the documents.

8. Publishing the Final Report

The final report, *Charting Higher Education Accountability: A Sourcebook on State-Level Performance Indicators*, chronicles the experiences of the 10 case-study states. (See attachment E for copy of report.) Collectively, the 10 states illustrate both differences and similarities in the manner in which each accountability process had originated, how performance measures or indicators were developed, and for what purposes the results are being used. The paper by Jones and Ewell, "Pointing the Way: Indicators as Policy Tools in Higher Education," opens the report and sets the context for understanding the rise of new accountability policies and performance indicators. The revised conceptual frameworks by Richardson and by Ewell bring closure to the report by providing analyses and interpretations of performance indicator development and use in the 10 states.

EVALUATION/PROJECT RESULTS

This project produced visible and demonstrable results from the separate activities outlined above and, even more apparent, as a result of the final project publication, *Charting Higher Education Accountability: A Sourcebook on State-Level Performance Indicators.*

As indicated, the planning and advisory group meetings were central to shaping the course this project took over the past 2 1/2 years. The meetings involving state-level policymakers, together with the regular input from advisory group members, served as mechanisms for interim evaluation and course correction. Although no formal evaluation (or summative assessment) of the separate activities was undertaken, periodic feedback served an important role in formative assessment and evaluation.

In preparing the case studies, the state higher education agencies were repeatedly contacted to evaluate the accuracy and relevance of our interpretation of developments in their state and provide valuable feedback. This activity helped the authors and project director to keep the case studies on track and produce a publication that all of the participating states would support.

An even more important indicator of this project's evaluation and results is the widespread use of the materials that were produced. Participants at the meetings often reported that they "took home what they learned"; that is, from the discussions about and exposure to how assessment/accountability issues were being confronted in other states, they were able to shape and redirect some of their own actions. The results from the project publication are becoming even more widespread. Copies have been sent to all state higher education agencies and other interested parties; in return, numerous statements have been received about its value and usefulness and frequent requests for additional copies are made.

Several requests for multiple copies also have been received from faculty members to use in teaching graduate courses on state policy.

The findings from this project also have been presented at national and state-level meetings. The most recent example was a presentation by Sandra Ruppert and Charles Lenth to the annual Kentucky Governor's Conference on College Trusteeship, where "quality and accountability" were a primary focus for a gathering of more than 200 public college and university trustees. Additional presentations and short articles in widely-distributed ECS publications (e.g., *State Leader*) are planned for the near future.

Finally, what we and others believe to be the positive evaluation and results of this project have convinced ECS to undertake an additional summary report. A 20-page policy guide titled, *Charting Higher Education Accountability: The Roots and Realities of State-Level Performance Indicators*, is now in draft form and scheduled for publication in November. This publication, aimed primarily at governors and legislators, legislative and executive assistants, state higher education leadership and others in policymaking positions, will summarize and set forth the principal findings from the project and the longer case-study publication.

Assessment, institutional accountability and the continuing challenges involved in defining and measuring student outcomes continue to be central concerns of ECS and its many constituents. The current ECS chairman, Governor Roy Romer of Colorado, frequently articulates the need for clear expectations and measurable outcomes in higher education. In the coming year, we will be addressing these issues as part of the chairman's agenda on "Quality Counts . . . Setting Expectations for Higher Education and Making Them Count," drawing on our past work in assessment and accountability from this project and others.

SUMMARY AND CONCLUSIONS

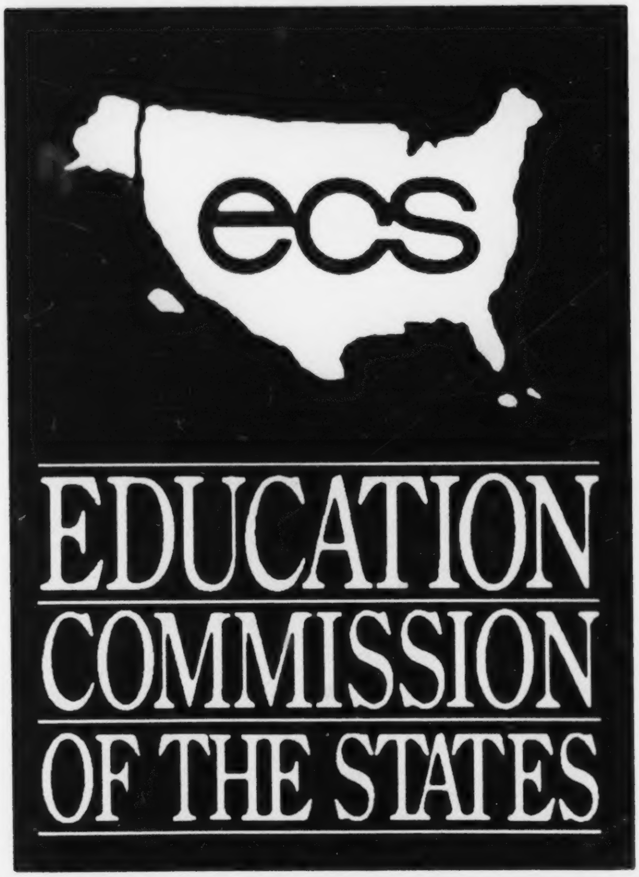
This project has been successful in meeting several important objectives and contributing to the continuing development of accountability policies and practices in many settings. Specifically:

- we explored and analyzed the complexities of student assessment and institutional accountability policies at the state level, particularly as these have taken shape in the development of state higher education performance indicators;
- we worked with states to relate assessment and accountability to other areas of state policy, including academic planning, finance and governance; and
- we organized numerous meetings, made presentations and produced materials that extended the reach of this project to many states, organizations and institutions.

The interest — particularly by policymakers, elected officials and the public at large — in the issues of the quality and performance of colleges and universities is continuing to grow. This project provided much of the documentation and analysis of this "accountability movement"; the specific issues and concerns have shifted over time while the overall interest in performance and accountability has remained a key concern of policymakers.

To meet the growing demands for performance and accountability, states need to be much clearer in articulating their expectations for higher education; and the indicator systems need to be more directly tied to these objectives and capable of accurately monitoring progress to achieve these results. This challenge will continue for states and for higher education institutions, and continued investments are necessary in order to provide long-term benefits. ECS will continue to be active and supportive in these areas and will look for partners in continuing to achieve progress.

Attachment A - ECS Organization Facts



EDUCATION
COMMISSION
OF THE STATES

Initiatives

ECS' work with select initiatives provides a major vehicle for influencing education policy. At any one time, staff members are working with people throughout the country to address major education challenges. This work provides an opportunity for ECS to influence policy in the states and to help education leaders improve their education systems. ECS initiatives include:

- *Re:Learning* — A partnership among ECS, the Coalition of Essential Schools in Providence, Rhode Island, and participating states, districts and schools, to fundamentally restructure the education system "from the schoolhouse to the statehouse."

- *School Finance* — Tracking of school finance systems in all 50 states and research on how education dollars flow from the state level to the school site, the implications of current budgeting and funding processes and the impact of restructuring of schools on the allocation of resources.

- *Mathematics and Science Improvement* — Collaborative work with national leaders in mathematics and

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science education reform, to promote the improvement of mathematics and science education.

- ***Urban Initiative*** — Helping states address education reform in urban areas by building leadership capacity, and fostering cross-agency collaboration.
- ***Cross-Agency Collaboration*** — Examining current strategies to coordinate education, health and social services and helping state and local policy makers understand the links between cross-agency collaboration and systemic education reform.
- ***Business/Education Partnership*** — Collaborative work with the Council for Aid to Education in four states to support efforts to improve the education system by encouraging the development of partnerships among the business community and education and political leaders.
- ***State Policy and College Learning*** — Work with state and campus leaders in an effort to strengthen undergraduate teaching and improve student learning through more effective state policies.
- ***Creating New Higher Education Compacts*** — Provide leadership to states and national business, political and education organizations to improve the match between what colleges and universities provide and what states and the public need.
- ***Teacher Education*** — Involvement in a national effort to improve the preparation of teachers and more closely link teacher preparation with efforts to restructure the public schools.
- ***School-College Collaboration*** — Addressing the state policy and leadership strategies for promoting partnerships between K-12 schools and higher education institutions that will help *all* students succeed.
- ***Campus Compact*** — A national coalition of 300 college and university presidents organized to promote and create public service opportunities for college students as an integral part of undergraduate education.

State Relations

Through its State Relations program, ECS monitors political and legislative activity across the country; maintains working relationships among ECS, its member states and other organizations; and supports Clearinghouse and network activities. State Relations provides an important collaborative link among many individuals and groups working to improve the quality of education.

Communications Efforts

As part of our effort to help create a national and state climate where education reform can flourish, ECS works closely with major national media. Our contributions range from putting issues in front of the media and providing a framework for a story to offering examples of successful school and district programs and identifying people to interview. ECS staff and constituents also contribute articles to various publications, participate in editorial boards across the country, provide communication workshops and consultations and work with organizations on public service campaigns. Over the past five years, ECS has greatly expanded its communications efforts to include the general public as well as the media and our traditional constituents.

Clearinghouse

The ECS Information Clearinghouse is the resource and research arm of ECS as well as a major centralized national source of information about education

issues and trends. The Clearinghouse responds to approximately 3,000 inquiries a year from legislators, governors' aides, political advisers, reporters, national education organizations, businesspeople, state and federal agencies, school boards and other groups, providing them with topical research and publications for sound decision making and reporting.
A resource library and computerized database are maintained on all 50 states with information on more than 300 topics.

Publications

A major publisher and distributor of education policy materials (both print and video), ECS' distribution center handles more than 100 titles. Each title is distributed free of charge to ECS commissioners and is marketed for sale to other constituents, both through direct marketing efforts and through other publications and forums in cooperation with constituent organizations. ECS' flagship publication, the *State Education Leader*, is published three times a year, with each issue providing an in-depth examination of a major education topic.

Regular and Special Meetings

ECS meetings are one more way that we work directly with our constituents on issues that affect them. ECS sponsors several regular education gatherings:

- *National Forum and Annual Meeting* — Attracts hundreds of education, political and business leaders, including ECS commissioners and alumni, each year to discuss major issues affecting K-12 and postsecondary education.
- *Steering Committee Meetings* — Brings together Steering Committee members (one ECS commissioner from each state) to discuss important education issues affecting their states.
- *Special National and Regional Meetings* — Includes meetings such as a mathematics and science education reform symposium with the National Science Foundation and a school finance conference with the National Conference of State Legislatures.

Education Commission of the States
707 17th Street, Suite 2700
Denver, Colorado 80202-3427
303-299-3600
FAX 303-296-8332

The mission of the Education Commission of the States (ECS) is to help state leaders develop and carry out policies that promote improved performance of the education system, as reflected in increased learning by all citizens.

About ECS

For over 25 years, ECS has been the only major education organization that does not serve a particular special-interest group, reaching out to thousands of people in literally every state, role group and major education organization. This distinction as an organization that cuts across roles and levels — local, district, state, federal — enables us to analyze all sides of an issue and, more important, bring together people with diverse perspectives to work with and learn from one another.

A combination of direct person-to-person contact, program and project work, group assistance through meetings and public visibility through communications work enables ECS to stay on the cutting edge of education issues and provide continuing assistance to constituents. It also makes ECS uniquely qualified to help policy makers change their education systems to serve the needs of all children.

History

The initial concept of an "interstate planning commission for education" was proposed by James Bryant Conant, president emeritus of Harvard University, in his book, *Shaping Educational Policy* (1964). Conant's studies of American education convinced him that the country needed a way for states to become more deeply involved in shaping education policy. Under the guidance of former North Carolina Governor Terry Sanford, Conant's proposal became reality. A unanimous vote at the 1966 National Governors' Conference called for a nationwide alliance for the improvement of education with the active leadership and personal participation of the governors.

Membership

Today, 49 states, the District of Columbia, Puerto Rico, American Samoa and the Virgin Islands have passed legislation to join ECS. Each member state or territory appoints, usually through the governor's office, seven ECS commissioners who represent all segments of education. These 371 commissioners include all the governors, more than 130 state legislators (usually heads of House and Senate education committees), state and local school board members, chief state school officers, state higher education executive officers, college presidents, superintendents, teachers and dozens of other prominent education leaders from all over the country. Commissioners serve one- to three-year terms as liaisons to other education leaders in their state and throughout the country. Each year, a different governor chairs ECS, alternating political parties. Over 4,000 policy makers and education leaders are ECS alumni.

Funding

As a nonprofit organization, ECS obtains financial support through a mixture of state fees, state contracts and foundation and federal grants. Current funding is approximately $6.5 million a year.

Networks

ECS sponsors five formal networks of education and political leaders:

- ECS ***Advisory Commissioners*** are the executive directors of 25 public and private national education associations. They advise ECS on the priorities of their constituents, who represent every major education audience.
- The ***State Education Policy Seminars*** (SEPS) network is jointly sponsored by ECS and the Institute for Educational Leadership. SEPS coordinators convene seminars in which state policy makers of differing political views openly explore and debate education issues.
- The ***Legislative Education Committee Chairs*** network, sponsored in conjunction with the National Conference of State Legislatures, organizes national and regional seminars to stimulate the thinking of legislative leaders on educational issues.
- The ***Governors' Education Policy Advisers*** network links both ECS and the National Governors' Association to the governor's office in each state. Group members meet at least twice a year to study education issues and interact with their peers in other states.
- The ***Legislative Education Staff Network***, co-sponsored with the National Conference of State Legislatures, enables legislative staff to share information and talk with experts about education issues.

Priorities

ECS is committed to a sustained, multi-year action agenda focusing on:

- **Fundamentally changing the education system** to better educate all students for life in the 21st century
- **Strengthening collaboration** by identifying and promoting policies that support collaboration among schools, colleges and other education and social services to serve children and youth more effectively
- **Setting clear, high standards** for student learning, the systems that support them and the work of ECS
- **Promoting communication** that is active, two-way and encourages all community members to be involved in the dialogue about what is best for students
- **Building an ethic of service**, both for students to the world around them and for ECS to its constituents
- **Embracing diversity**, making children our priority and tackling the issues of poverty and discrimination in our society

To reach these goals, identify other critical education issues and carry out our mission of promoting a quality education for all students, ECS conducts policy research, surveys and special studies; convenes state, regional and national forums; maintains an information clearinghouse; keeps education issues in front of the public through communications efforts; provides technical assistance to states; helps states develop policies to improve education; publishes education policy materials; and fosters nationwide leadership and collaboration in education.

Staff

Headquartered in Denver, Colorado, the ECS staff of 55 includes educators, policy analysts, economists, testing and evaluation experts, government relations experts, information and communication strategy specialists, writers, editors, public relations and production personnel, research associates and support staff. The staff assists ECS' constituents by gathering, analyzing and communicating information about varied K-12 and higher education issues. Campus Compact, an ECS project on community service, employs eight people and is based at Brown University in Providence, Rhode Island.

ECS Officers (1994-95)

Roy Romer, Chairman; Governor of Colorado
Tommy G. Thompson, Chairman-Elect; Governor of Wisconsin
Jim Edgar, Immediate Past Chairman; Governor of Illinois
John Hansen, Vice Chairman; State Senator, Idaho
Piedad F. Robertson, Treasurer; Secretary of Education, Higher Education Coordinating Council, Massachusetts

ECS STAFF, 303-299-3600

President's Office

Frank Newman, President, Ext. 624
Peggy Arkins, Administrative Assistant to the President, Ext. 629
Maria Bucknam, Secretary, Ext. 628
Lee Calvert, Administrative Assistant, Ext. 659
Dee Green, Director of Development/Special Assistant to the President, Ext. 611

Vice-President's Office

Anna Chan, Administrative Assistant to the Vice President, Ext. 656
Kay McClenney, Vice President, Ext. 605
Linda Rose, Assistant to the Vice President, Ext. 651

Policy and Programs Studies

Sheila Arredondo, Policy Analyst, Ext. 643
Jane Armstrong, Director of Policy Studies, Assessment/Restructuring, Ext. 632
Rexford Brown, Senior Fellow, Ext. 652
Josie Canales, Project Assistant, Ext. 682
Van Dougherty, Policy Analyst, Systems Changes/Urban Initiatives, Ext. 630
Lyn Hesketh, Project Assistant, Ext. 639
Chrissy Hussey-Thompson, Project Assistant, Ext. 621
Christine Johnson, Director of Urban Initiative, Ext. 636
Charles Lenth, Director, Higher Education Policy Studies, Ext. 667
Robert Palaich, Director of Policy Studies, Systems Change, Ext. 642
Sandra Ruppert, Policy Analyst, Higher Education, Ext. 676
Nancy Willis, Research Assistant, Higher Education, Ext. 606

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Re:Learning
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Deborah Clemmons, Systems Coordinator, Ext. 662
Jennifer Crandall, Project Assistant, Ext. 668
Ron Rapp, Systems Coordinator, Ext. 670

State Relations and Clearinghouse
Sharmi Arora, Library Assistant/Technician, Ext. 615
Carol Breibart, Administrative Assistant, Ext. 617
Kathy Christie, Information Clearinghouse Coordinator, Ext. 675
Mary Fulton, Policy Analyst, Finance, Ext. 679
Alex Medler, Research Associate, Ext. 635
Janelle Miller, Research Assistant, Ext. 603
Chris Pipho, Division Director, Clearinghouse/State Relations, Ext. 604
Gerrit Westervelt, State Relations Director, Ext. 612

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Martha Lederer, Project Coordinator, Ext. 647
Anita Margittai, Communications Assistant, Ext. 627
Christie McElhinney, Public Relations Manager, Ext. 695
Sherry Freeland Walker, Publications Director, Ext. 626
Anna M. West, Production Coordinator, Ext. 655

Administration
Stephanie Cardinale, Accountant, Ext. 693
Barbara Deard, Administrative Assistant/Benefits Administrator, Ext. 620
Judy Feather, Central Services Coordinator, Ext. 692
Rose Marie Franzen, Network Administrator, Ext. 649
Antionette Garcia, Accounting Clerk, Ext. 660
Mary Guidotti, Accountant, Ext. 661
Charley Kahler, Database Programmer, Ext. 663
Christine Morgenweck, Human Resources Administrator, Ext. 666
Edie Romanski, Receptionist, Ext. 0
Barbara L. Sharp, Division Director, Administrative Services, Ext. 673
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Craig Woodruff, Central Services Technician, Ext. 694

Campus Compact Staff, 401-863-1119
Sarah Eads, Intern
Daniel Gardner, Network Director
Betty Johnson, Office Manager
Nancy Rhodes, Director
Melissa Smith, Project Assistant
Jan Torres, Project Director
Marie Troppe, Project Associate

7/94

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— Attachment B - Case Study Letter & —
List of Contacts

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303 299 3600
FAX 303 296 8332

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President
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December 11, 1992

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Dear 9~:

The Education Commission of the States' (ECS) initiative on "State Level Indicators of Undergraduate Educational Effectiveness" is currently exploring, with support from the Fund for the Improvement of Postsecondary Education (FIPSE), some of the critical issues related to educational effectiveness and public accountability in undergraduate education. We seek your assistance as we undertake a comprehensive review of how selected states have sought and used information about the performance of students, institutions and systems of higher education to inform policy decisions.

South Carolina and 9 other states (Colorado, Florida, Illinois, Kentucky, New York-SUNY, Tennessee, Texas, Virginia and Wisconsin) were selected for this study because some form of qualitative or quantitative performance measures are currently used or being developed to assess student learning outcomes and/or institutional effectiveness related to undergraduate teaching and learning. For this study, we refer to these measures as **indicators of educational effectiveness** and we believe they may hold some promise for addressing both accountability and improvement purposes. We also believe that these 10 states will offer some of the best examples of innovative and alternative policy approaches that may assist other states in charting a course for undergraduate education reform.

The purposes of this study are to derive from current state experiences with accountability, assessment and educational effectiveness the lessons learned and the broader implications for improving state policy and practices. ECS is assisted in this initiative by Peter Ewell of the National Center on Higher Education Management Systems and Richard C. Richardson Jr. of Arizona State University. The study is also coordinated with, and is partially funded by ECS's State Policy and College Learning project, supported by the Pew Charitable Trusts.

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Our analysis will focus on three major objectives: (1) to update materials collected as part of the 1989 ECS-SHEEO survey on assessment and accountability and report on how the increasingly more difficult choices regarding the allocation of scarce resources are reflected in state policies related to accountability, assessment and educational effectiveness; (2) to provide a better understanding of how information about educational effectiveness might meet the need for public reporting on the conditions of a state's system of higher education; and (3) to examine how information about educational effectiveness can and should contribute to a state's development of policies that collectively create a supportive environment for undergraduate education reform.

As a first step, **we would like to construct a state history of the formulation, planning, implementation and review of policies and practices related to the assessment of educational effectiveness. We are interested in obtaining materials (such as state master plans, accountability or assessment legislation, state level "report cards", etc.) that best reflect a state's experience, particularly since 1989 when the last ECS-SHEEO state survey was conducted.** We have intentionally left this definition fairly broad since the extent to which this information is related to other state policies varies from state to state.

On the following page is a list of documents available through the ECS-SHEEO Higher Education Clearinghouse. We request your assistance in identifying and providing us with the most pertinent documents needed to complete the picture.

ECS also views this effort as a unique opportunity to connect people and information. We hope to get your insights and suggestions along the way through forums and papers we develop. We will share with you what we are learning by making information available from all the states working with us on this study. To start, we will send you a complimentary copy of the bibliography of all the state documents we receive as well as any ECS publications on state policy and assessment of undergraduate education from the enclosed list.

We will be calling your office shortly to talk with you or a member of your staff more about this study. Please feel free to call me at 303-299-3676 if you have any questions or to request publications. I look forward to talking with you soon.

Sincerely,

Sandra Ruppert
Policy Analyst and Project Director

cc: Jim Mingle
Kay McClenney
Aims McGuinness

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ASSESSMENT PUBLICATIONS
Education Commission of the States

Assessing College Outcomes: What State Leaders Need to Know. This guide addresses the most common questions asked by state policy makers and others about how state assessment policy can benefit both college students and the state. It is designed to help state policy makers understand the questions *they* should ask about whether, what and how well students are learning. 1991 (PA-91-3); 24 pp.

Toward One System of Education: Assessing to Improve, Not Merely Audit by Grant Wiggins. The author discusses how assessment can promote a more "seamless" K-12/graduate school education system. He argues that assessment should *improve* performance by providing feedback and offers 10 propositions for policy makers to consider. 1991 (PA-91-2); 38 pp.

Assessing Progress in Minority Access and Achievement in American Higher Education by Michael T. Nettles. The author analyzes education challenges facing minorities and proposes ways to use assessment to expand and enrich their access and learning opportunities. 1991 (PA-91-1); 33 pp.

State Initiatives in Assessment and Outcome Measurement: Tools for Teaching and Learning in the 1990s. Patterns and profiles of state policy on assessment, instruments and approaches, resources, commitments and future plans. 1990 (PA-90-1); 111 pp.

Assessment and Accountability in Higher Education. Summary of conference proceedings from the Assessment and Accountability in Higher Education Conference, December 1989. 1990 (PA-90-2); 28 pp.

Assessment and the "New Accountability": A Challenge for Higher Education's Leadership. Discusses changes in the ideas of academic improvement and accountability and the implications of those changes for assessment policy. 1990 (PA-90-3); 22 pp.

State Policy on Assessment: The Linkage to Learning. Explores policy issues relating assessment to curriculum, teaching and resource needs. 1990 (PA-90-4); 10 pp.

State-Based Approaches to Assessment in Undergraduate Education: A Glossary and Selected References. Provides state and institutional leaders with a common set of definitions for thinking and talking about assessment policy in undergraduate education. 1988 (PS-88-2); 7 pp.

State-Based Case Studies of Assessment Initiatives in Undergraduate Education: Chronology of Critical Points. Outlines critical junctures in case studies of five states' approaches to assessment in undergraduate education. 1988 (PS-88-3); 11 pp.

Assessment and Outcomes Measurement — A View From the States. Responses to an ECS 50-state survey of statewide or systemwide approaches to assessment and outcomes measurement. 1987 (PS-87-1); 57 pp.

EDUCATION COMMISSION OF THE STATES
ROSTER FOR Indicators Project
PRINTED ON December 11, 1992

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Gordon K. Davies
Director
State Council of Higher Education
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Richard D. Wagner
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Board of Higher Education
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Springfield, IL 62701
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Attachment C - Interview Format & Contact List

Education Commission of the States
707 17th Street, Suite 2700
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FAX 303-296-8332

EDUCATION COMMISSION OF THE STATES

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President
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MEMORANDUM

DATE: December 21, 1992

TO: David Longanecker

FROM: Sandra Ruppert

RE: ECS project on State Level Indicators of Undergraduate Educational Effectiveness

I am looking forward to our telephone conversation scheduled for tomorrow, December 22 at 9:30 a.m. Attached is a two page project summary for your information. In addition to answering any questions you might have about the project, I would like to ask you:

- Are there other reports or documents, in addition to those we currently have in our Clearinghouse, that may be helpful for getting a clearer picture of your state's experience with accountability and assessment of educational effectiveness?

- Who are the key education and policy leaders that we should interview to fill out our understanding of how policies related to assessment and accountability are developed and implemented in your state?

- Could you give me a brief background on the overall framework of these policies? Important objectives or goals in this area? Major changes in the last few years? Are you generally happy with the way these policies are working?

I expect our conversation should take about 20-30 minutes. Your time and assistance on this effort are greatly appreciated.

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Interview Participants
for FIPSE Indicators Project

Colorado

David A. Longanecker
Executive Director
Commission on Higher Education

Florida

Cheryl Blanco
Education Policy Director
Postsecondary Education Planning Commission

Illinois

Bob Wallhaus
Executive Deputy Director
Board of Higher Education

Kentucky

Joanne Lange
Deputy Executive Director for Planning
Council on Higher Education

New York

Joseph Burke
Provost
SUNY System

South Carolina

Fred Sheheen
Commissioner
Commission on Higher Education

Tennessee

Arliss Roaden
Executive Director
TN Higher Education Commission

Texas

Joan Matthews
Director of Special Projects
TX Higher Education Coordinating Board

Virginia

Peg Miller
Associate Director, Academic and Student Affairs
VA State Council on Higher Education

Wisconsin

Stephen Portch
Vice President for Academic Affairs
University of Wisconsin System

Attachment D - Seminar Letter of Invitation and Participant Roster

Education Commission
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June 2, 1993

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Dear 9~:

You are invited to attend an ECS seminar on "Indicators of Quality and Accountability for Higher Education Systems" on Wednesday, July 14, 1993, at the Pittsburgh Hilton & Towers Hotel from 1:00 - 5:00 p.m. in Ballroom 3, Mezzanine Level. The purpose of the seminar is to discuss current and emerging state policies and practices related to the definition, assessment and reporting of higher education quality issues.

We are hosting this seminar in order to bring together state higher education officials from the ten states assisting ECS in our project on state level indicators of undergraduate educational effectiveness. Earlier this year we contacted your office and those in nine other states [Colorado, Florida, Illinois, Kentucky, New York (SUNY system only), South Carolina, Tennessee, Texas, Virginia and Wisconsin] to help us in our effort to examine how a select number of states have developed and used indicators for assessing the performance of students, institutions and systems of higher education. A project bibliography comprising the various documents provided by the states for our study is attached.

The seminar will be an unique opportunity for participants to hear and exchange information about recent assessment and accountability activity in each of the ten states. On hand will be Richard A. Richardson, Professor, Division of Educational Leadership & Policy Studies, Arizona State University; and Peter Ewell, Senior Associate, National Center for Higher Education Management Systems (ECS project consultants), to discuss trends and patterns among the ten states. During the seminar we also hope to cover other state- and federal-level developments related to the use of performance indicators, assessment of educational quality and public accountability. I am currently in the process of putting together the meeting agenda so I am interested in hearing about any specific topics you would like to discuss. Please call me with your ideas at 303-299-3676 as soon as possible.

1993 ECS NATIONAL FORUM AND ANNUAL MEETING
• July 14-16, 1993 •
• Pittsburgh, PA •
CONNECTIONS

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We at ECS are acutely aware that tight state budgets make attending meetings (no matter how useful or appropriate) increasingly more difficult, if not impossible. Thus, I am pleased to inform you that our grant from the Fund for the Improvement of Postsecondary Education (FIPSE) will allow us to waive a registration fee for this seminar. Also, through funding made available from ECS's State Policy and College Learning project, supported by the Pew Charitable Trusts, we are able to offer a $500 stipend in the form of a travel voucher to each of the ten states to help offset some of your travel expenses.

Please complete the attached participant registration form and indicate whether you wish to receive these funds. This form will also be used for roster purposes. Either return in the envelope provided inside the preliminary meeting brochure or fax (303-296-8332) before Friday, June 18, 1993. Upon receipt, we will issue a travel expense voucher in the name of the participant showing the $500 allowance.

This seminar is a pre-meeting event in conjunction with the 1993 ECS National Forum and Annual Meeting from Wednesday, July 14, through Friday, July 17. The preliminary meeting brochure contains detailed information about registration, hotel, travel, other events, sessions and state teams. The theme "Connections" sums up what must happen if we are to succeed in improving our education system. You will also find enclosed a schedule of higher education sessions highlighting the issues being addressed.

Although there are no registration fees associated with this particular pre-annual meeting event, if you plan to attend any other ECS annual meeting session, the registration form included in the preliminary brochure also must be completed and returned with the appropriate registration fee payment.

PLEASE NOTE: Deadline for hotel room reservation is Monday, June 14, 1993. The hotel registration form is located in the preliminary brochure. Return the completed form directly to: The Pittsburgh Hilton & Towers, Attn: Reservations Department, Gateway Center, Pittsburgh, PA 15222.

If you have any questions about the pre-conference seminar or the annual meeting, feel free to call Josie Canales, project assistant, at 303-299-3682.

I hope you will be able to join us for what promises to be an interesting and productive seminar and that you will stay on in Pittsburgh for the ECS National Forum and Annual meeting.

Sincerely,

Sandra Ruppert
Policy Analyst

SR/jmc
Enclosures

Education Commission of the States
707 17th Street, Suite 2700
Denver, Colorado 80202-3427
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FAX 303-296-8332

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Frank Newman

July 1, 1993

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Dear 9~:

I am pleased you will be attending the ECS Workshop and Seminar on "Indicators of Quality and Accountability for Higher Education Systems" on Wednesday, July 14 in Pittsburgh, Pennsylvania. We have put together quite a full and informative session that should allow ample opportunity for interactive discussion. Attached are the preliminary agenda and roster of participants for the meeting.

In preparation for our meeting, I have included for your review a set of the four case studies we have completed to date: Colorado, Illinois, South Carolina and Tennessee. We will devote a portion of our meeting to discussing both the format and the content of the case studies. While each author used the same general format for structuring his or her case study, we opted to exercise considerable latitude in how the initial draft would be written. I would like to get your thoughts and reactions on these drafts before we proceed with revising them and with completing the remaining six. Does the format work for "telling the state story"? Are there other ways in which the case studies could be strengthened or improved? And, most importantly, we want to know if the information based on our reading and interpretation of the state materials is accurately and objectively reported.

Also enclosed is a complete bibliography for the ten states. In an earlier mailing, the last two pages were inadvertently left out. I hope this did not cause an inconvenience for anyone.

1993 ECS NATIONAL FORUM AND ANNUAL MEETING
• July 14-16, 1993 •
• Pittsburgh, PA •
CONNECTIONS

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In addition, a travel expense voucher issued in your name is enclosed indicating that you accepted a $500 stipend to cover travel expenses up to $500 associated with this meeting. Please sign and return with original receipts by Friday, August 13, 1993. Allowable expenses include airfare, meals not provided at the meeting, cabfare and hotel. To avoid delays in processing your request, original receipts must be submitted for all expenses over $20. Please include the original airline ticket stub as well. More complete expense reimbursement guidelines may be found on the reverse side of the form.

I look forward to seeing you in Pittsburgh!

Sincerely,

Sandra S. Ruppert
Policy Analyst

EDUCATION COMMISSION OF THE STATES
HIGHER EDUCATION WORKSHOP AND SEMINAR

INDICATORS OF QUALITY AND ACCOUNTABILITY FOR HIGHER EDUCATION SYSTEMS

Wednesday, July 14, 1993
1:00 - 5:00 p.m.

Pittsburgh Hilton and Towers Hotel
Ballroom Three, Mezzanine Level
Pittsburgh, Pennsylvania

Revised Agenda

1:00 - 1:15 p.m. WELCOME AND INTRODUCTIONS

1:15 - 3:00 p.m. **UPDATE AND DISCUSSION ON ECS'S "INDICATORS" PROJECT**

A. Current status and next steps — Sandra Ruppert

B. Overview of patterns and trends among the ten states — Peter Ewell

C. An emerging model for explaining prevailing state practices and policies — Richard C. Richardson Jr.

D. Discussion of the four draft case studies: Colorado, Illinois, South Carolina, Tennessee

3:00 - 3:10 p.m. REFRESHMENT BREAK

3:10 - 4:20 p.m. **UPDATE AND DISCUSSION ON DEVELOPING STATE AND NATIONAL ISSUES**

A. New policies related to institutional improvement and accountability in the SREB states — Sandra Ruppert

B. Content and use of state higher education "report cards" — Charles Lenth and Dennis Jones

C. Encouraging public debate about higher education's purpose and function in California — Joni Finney

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EDUCATION COMMISSION OF THE STATES
HIGHER EDUCATION WORKSHOP AND SEMINAR

INDICATORS OF QUALITY AND ACCOUNTABILITY FOR HIGHER EDUCATION SYSTEMS

Wednesday, July 14, 1993
Pittsburgh, Pennsylvania

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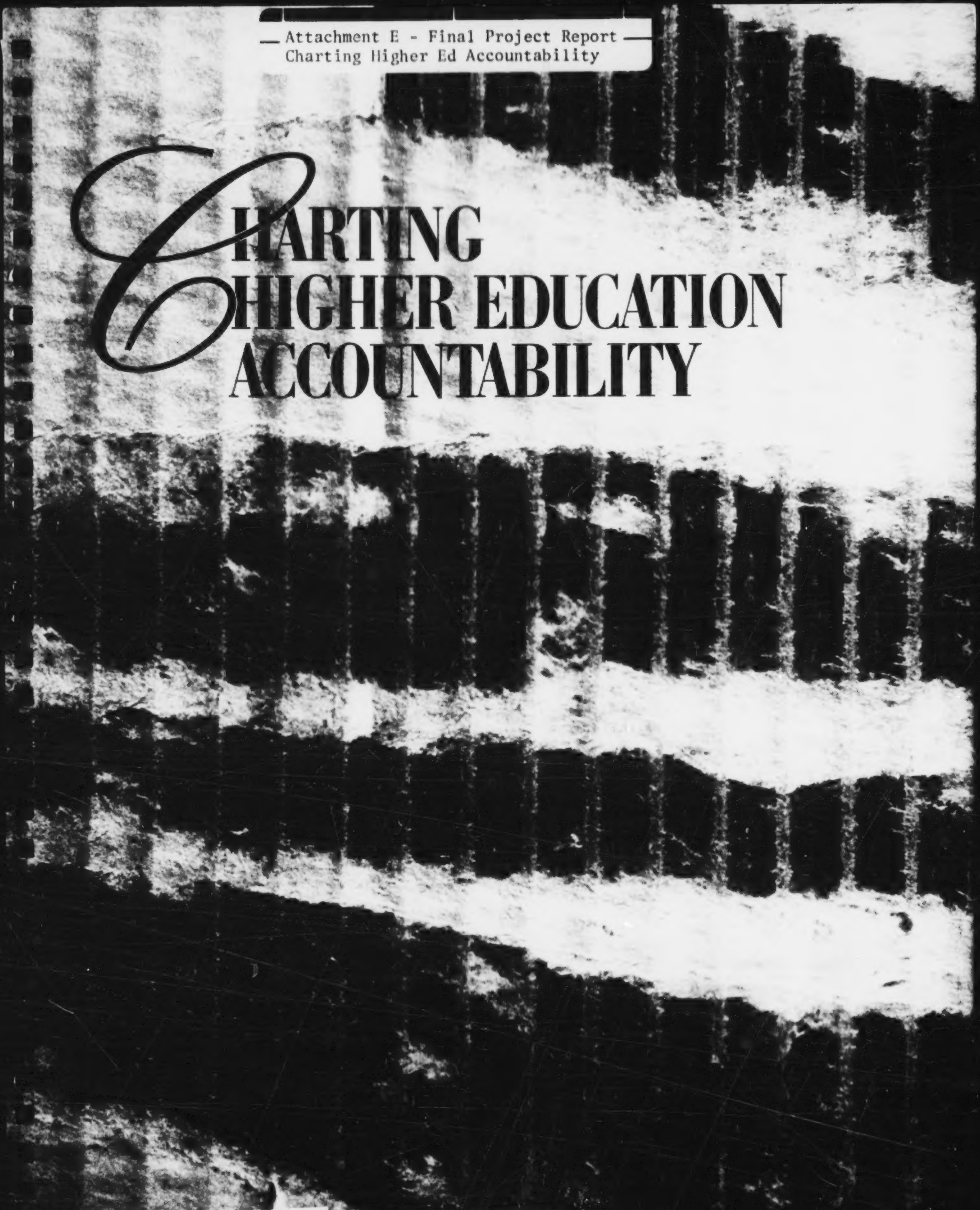

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CHARTING HIGHER EDUCATION ACCOUNTABILITY

A SOURCEBOOK ON STATE-LEVEL PERFORMANCE INDICATORS

Sandra S. Ruppert
Editor

Education Commission of the States
707 17th Street, Suite 2700
Denver, Colorado 80202-3427

June 1994

Preparation of this publication was supported in part by the Fund for the Improvement of Postsecondary Education (FIPSE) and through the ECS State Policy and College Learning Project, funded with grants from The Pew Charitable Trusts. The content and opinions contained herein are the responsibility of ECS and do not necessarily reflect positions of FIPSE or The Trusts.

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ACKNOWLEDGMENTS

Across the nation, state leaders are showing increasing interest in the development and use of state-level performance indicators for higher education. To gain a better understanding of how performance indicators can contribute to state policy and improve accountability, the Education Commission of the States (ECS) embarked on a project to trace the experiences of 10 states that have instituted various types of performance indicator. Case studies describing those experiences make up the central core of this report.

With the companion policy guide, *Charting Higher Education Accountability: The Roots and Realities of State-Level Performance Indicators* (available separately from ECS), these case studies and the accompanying analytical essays are intended to describe and evaluate current policy and practice across the 10 states. The two reports are independent, but together they represent a comprehensive picture of prevailing state experiences. Neither report is intended to be prescriptive or to provide a consensus opinion. Instead, it is hoped that both reports will contribute to the vital debates currently engaging public officials and institutions of higher education over the issue of reporting performance and, more generally, serving the needs of states and the public.

ECs gratefully acknowledges the primary support received from the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE), as well as additional support provided by The Pew Charitable Trusts, through ECS's project on *State Policy and College Learning.* We also deeply appreciate the invaluable insights, expertise, and assistance furnished by the 10 states, and the chief executives and staffs of their higher education agencies that made the project possible.

Although responsibility for the contents rests ultimately with ECS, the report represents a collaborative effort — many people generously contributed their time and energy to this report in a variety of ways. Peter T. Ewell, Dennis P. Jones, Richardson C. Richardson, Jr., and Gordon Van de Water wrote the case studies and accompanying essays. Diana M. DeLuca and Virginia L. Golder provided primary editorial assistance. ECS staff members, Sherry Freeland Walker and Anna West assisted with editing and production. Debra Komodore designed the cover.

Additionally, several others provided assistance in planning and review activities at various stages of the project, including Grady Bogue, Patrick Callan, Theodore Marchese, Dewayne Matthews, James Mingle, and Michael Nettles. At ECS, Josie Canales, Kay McClenney, and Charles Lenth (first as a member of the planning group, and then as ECS director of higher education) provided support, assistance, and guidance throughout the course of this project. Former ECS colleague, Aims McGuinness, Jr., contributed not only to project planning efforts but also helped in making critical connections between this project and related ECS work supported by The Pew Charitable Trusts. Joni Finney, also formerly with ECS, played a major role in project design, planning, and review. Peter Ewell and Dick Richardson, as project consultants, contributed to all aspects of this project.

ECS welcomes comments and reactions to this report. We also welcome suggestions on how we can enhance our own accountability by improving our efforts to address critical higher education issues facing state policymakers. Please direct your response to ECS, 707 17th Street, Suite 2700, Denver, Colorado 80202.

Sandra S. Ruppert

Sandra S. Ruppert
Project Director

INTRODUCTION

Since 1990, state policymakers have been increasingly interested in the educational quality, productivity, and effectiveness of public colleges and universities. This move towards greater accountability has been precipitated in most states by decreased state resources for higher education, rising costs, and growing demands for access. Policymakers look to state-level accountability measures to guide state planning and budgetary decisions and to monitor the "public investment" in higher education.

For accountability purposes, a growing number of states are adopting "performance indicators," or common measures for colleges and universities to assess and report their performance. Selected indicators range from easily quantifiable statistics such as faculty/student ratios to more qualitative measures such as plans to increase minority student enrollment. In most cases, indicators are published in a higher education annual report or "report card," which allows for institutional comparisons and provides a readily understandable format for a broad audience.

Ten states have been among the leaders in developing new accountability policies and performance indicators: Colorado, Florida, Illinois, Kentucky, New York, South Carolina, Tennessee, Texas, Virginia, and Wisconsin. Their experiences form the foundation for this report. Collectively, the 10 states constitute an interesting mosaic, presenting both differences and similarities in the manner in which each accountability process originated, how performance measures or indicators were developed, and for what purposes the results have been used.

Peter T. Ewell and Dennis P. Jones set the context for understanding the rise of new accountability policies and performance indicators in their essay, "Pointing the Way: Indicators as Policy Tools in Higher Education," which comprises the first part of this report. In their essay, they define performance indicators, explain the reasons why states are interested in them, and offer some insights into the rationale behind them. Their discussion provides an introduction to the 10 state case studies that follow.

In each of the 10 states, new accountability policies originated either with the legislature or the state higher education agency. In some states, the impetus came from legislative or gubernatorial efforts to restructure government services in general. In others, the review of higher education's performance was part of a general reform movement involving K-12 education. Where accountability policies were initiated by the governing or coordinating board, they were often designed to forestall a legislative mandate or were part of a broader set of policy initiatives perceived to be an important condition to maintaining or increasing institutional autonomy.

Despite diverse origins, nearly all the case-study states can trace the roots of the new accountability policies back to earlier assessment initiatives. State efforts to promote assessment of student learning began as early as the late 1970s, with most states joining the movement by the late 1980s. The difference between earlier assessment efforts and the more recent accountability policies, however, lies in their purposes and their processes. Earlier assessment efforts were decentralized and institution-based. Colleges and universities were encouraged to develop evaluation measures unique to their missions, permitting measurement over time but not interinstitutional comparison. This process is still ongoing in most states, where it has been useful in promoting student learning assessment and improvement in academic programs.

New accountability policies, on the other hand, reflect the view that higher education needs to be more responsive to state concerns and more publicly accountable to a broader constituency that includes students, employers, parents, and the general public. While accountability requirements have built upon rather than replaced earlier assessment efforts, the added element of public reporting on a set of performance indicators gives those with a stake in higher education a better sense of what is being achieved with public resources.

Responsibility for identifying the set of performance indicators varies among the states. Some originate with governing or coordinating boards, others in state legislatures, still others from the work of specially appointed commissions or committees. Most states share a common core of indicators, although the actual number of indicators typically ranges between 15 and 25 elements. This consistency has more to do with the ready availability of certain data than with broad consensus about what is most important. From state to state, efforts have been made to use these data only to compare institutions with peers and to be sensitive to circumstances that affect how data should be interpreted.

How performance indicators are linked to planning and budget also varies by state. In some instances, the higher education agency was able to tie indicators directly to statewide or system planning efforts. In others, indicators were developed rapidly and thus connections are indirect at best. While only Tennessee has a substantial history of linking performance to funding, five other states have proposed or initiated such a program. Connections to the budget are more indirect in other states as higher education agencies attempt to "strike a deal" with state legislatures, trading greater accountability results for more flexibility in the use of resources.

It is important to recognize that the case studies were written during the course of a year and are "snapshots" in time. The development of performance indicators has continued to evolve in each of the states. In some cases, the latest related developments are not reported. For example, Colorado lawmakers passed a 1994 bill that ties performance to incentive funding for higher education, Virginia has taken additional steps towards implementing performance indicators, and Florida recently released a statewide accountability plan. Some of the more recent changes are referenced in the two analyses by Richard C. Richardson, Jr., and Peter Ewell that follow the 10 case studies.

Richardson's and Ewell's essays bring closure to this report by providing analyses and interpretations of performance indicator development and use in the 10 states. Richardson employs two classification models: (1) an input/output/outcome model; and (2) a quality definition model. His first model adapts indicator categories outlined in *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. By definition, *inputs* are baseline measures of instructional inputs and monetary resources (e.g., student/faculty ratios, state appropriations per capita, and average class size). *Outputs* are measures of institutional production (e.g., course completion rates, total degrees awarded, and time-to-degree). *Outcomes* measure qualitative benefits to students and the state while taking into account institutional missions (e.g., student performance on nationally normed tests, placement of graduates, and results of alumni satisfaction surveys). Using this scheme, Richardson observes that states are currently far more interested in output indicators than inputs and show signs of a growing interest in outcomes.

In Richardson's second model, performance indicators are assigned to five categories of quality: (1) transcendent quality, through institutional rank or reputation; (2) cost/benefit quality, determined by comparing institutional inputs and outputs with system and institutional goals; (3) process-based quality, assessed by examining output and outcome indicators with respect to explicit standards; (4) product-based quality as determined by the measurable attributes of graduates; and (5) user-based quality, measured by client satisfaction. Richardson concludes that each definition suggests ways of measuring quality by what is valued by various higher education stakeholders (e.g., the state legislator, the student, the higher education administrator, and the general public).

In his analysis, Ewell lists performance indicators according to categories conforming generally to state goals or domains: (1) instructional quality (inputs, processes, outcomes); (2) general efficiency and productivity; (3) condition of the asset; (4) diversity, access, and equity; (5) articulation and K-12 linkages; and (6) relation to state needs. In the case-study states, policymakers emphasize instructional quality and show a growing interest in measuring efficiency and productivity. Ewell concludes that regardless of which indicators are chosen, they "must be seen as a tool to shape the future, not a collection of statistics to report the past." They must meet both the short-term needs for accountability and the long-term needs for planning and priority setting.

Readers are invited to review the 10 case studies and to reach their own conclusions. Although performance indicator development and use are still preliminary in most states, the 10 states provide useful lessons for state policymakers and institutional leaders considering such an approach.

PROJECT AND REPORT BACKGROUND

This report is one of two publications resulting from a two-year ECS project to examine state-level performance indicators. It is supported by grants from the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) and The Pew Charitable Trusts (through the ECS Project on State Policy and College Learning). The second publication, *Charting Higher Education Accountability: The Roots and Realities of State-Level Performance Indicators*, is a guide for state and higher education policymakers.

ECS has a long history of involvement with state higher education assessment and accountability policy. Beginning in 1985, ECS published *Transforming the State Role in Undergraduate Education*, which, among other things, recommended that (1) a state's system of higher education should be monitored to examine the extent to which it meets state goals for undergraduate education, and (2) the system should report its results periodically. In 1986, in conjunction with the American Association for Higher Education and the State Higher Education Executive Officers, ECS conducted a national survey of state assessment initiatives.The survey was repeated in 1989 as part of a project, supported by FIPSE, to help further the national dialogue on higher education assessment. The project culminated with the publication, *Assessing College Outcomes — What State Leaders Need to Know*, a policy guide that answers questions about the difficulties and rewards involved in using assessment policy to benefit both students and the state.

This current project builds directly on such past work. ECS began this project, again with FIPSE support, by focusing on educational quality and how it is perceived and assessed by states. Cross-state forums of educational leaders and policymakers were held to test ideas about new broader definitions and understandings of *quality*. These discussions led to some key observations:

- Measurement and reporting should be clearly tied to a broad state policy framework for higher education.
- Accountability reporting needs to be viewed less as a product and more as an iterative process.
- State policymakers are interested not only in educational quality but in productivity, efficiency, equity, and effectiveness.

As the project unfolded, 10 case-study states were selected to provide further insight into new policy approaches related to these points. Additional support for the work with 10 states was provided by The Pew Charitable Trusts through the ECS project *State Policy and College Learning*, an effort that examines how state policy can promote significant improvements in undergraduate teaching and student learning.

In conducting the case studies, ECS looked at materials such as master plans, accountability or assessment legislation, and state-level reports. In addition, the heads of state higher education coordinating or governing boards or their designees were interviewed and given an opportunity to review drafts of the studies. Although the case studies were reviewed by outside parties, responsibility for the contents of this document rests with ECS.

POINTING THE WAY: INDICATORS AS POLICY TOOLS IN HIGHER EDUCATION

Peter T. Ewell and Dennis P. Jones

In recent years, the policy context for state higher education has become more complex and the need for coherent policy more urgent. Consistent with the expansion of knowledge and technology, college and university programs have grown in number and become increasingly diverse. Workforce requirements have also changed: a generation ago, the skills needed for global competitiveness could be taught in secondary schools; today, most are taught at the postsecondary level. Funding processes, too, have changed. In the past, public investment levels in higher education kept pace with changing expectations, while today such resources are increasingly scarce. As a result, the challenge to manage the higher education enterprise effectively in a manner consistent with public purposes has never been greater.

As with health care and other complex and costly public enterprises, state governments are turning to statistical indicators as a tool to help develop and monitor effective higher education policy. The purpose of this analysis is to help state education leaders establish an appropriate state-level indicator system for higher education. It seeks, first, to describe such systems and how they work; and, second, to provide a set of comprehensive, policy-level questions state leaders can ask when reviewing the soundness and utility of any particular set of higher education indicators.

INDICATORS AS POLICY TOOLS IN HIGHER EDUCATION

What is an Indicator?

Indicators can best be described as policy-relevant statistics produced regularly to support overall policy planning and monitoring at the national, state, or system level. Among the most prominent U.S. examples are the Department of Labor's unemployment rate and the Department of Commerce's report on Gross Domestic Product (GDP), both of which are used to measure the nation's economic health. An international example is the infant mortality rate used by the U.S. Public Health Service as one gauge of the effectiveness of the national health care systems. In fields such as these, indicators are carefully selected to provide specific insight and evaluation, purposes that apply to indicators whether they measure the nation's economy or its system of higher education.

For purposes of this analysis, then, an *indicator* is a concrete piece of information about a condition or result of public action that is regularly produced, publicly reported, and systematically used for planning, monitoring, or resource allocation at the state or system level. Such indicators are intended to be used together, not singly or out of context.

In the context of higher education, indicators are used to provide an indirect overview, often through the use of proxy measures designed to reflect trends and conditions accurately and effectively. They include statistics both about current practices (e.g., the proportion of freshman classes taught by full time faculty) and about key features of the higher education enterprise (e.g., the proportion of undergraduate curricula that require a thesis or "capstone experience" to obtain a degree).

Motivations Behind Indicators

Recently, a number of forces have combined to stimulate state-level interest in and justify the use of higher education indicators:

Increasing complexity and size of the higher education enterprise as a whole

Since 1965, enrollments in higher education have more than doubled, new kinds of institutions have been created, and the student bodies have become more diverse. Used properly, indicators can help make sense of this complexity by summarizing efficiently the current condition of higher education and the degree to which state objectives for higher education are being attained.

Rising costs in delivering higher education and an eroding state resource base

State budgets have become pressed at the same time that budgetary requests from public colleges and universities have grown. Well-constructed indicators potentially can provide an efficient and relatively unambiguous set of tools to help guide available state-level resources toward the problems and areas where they are most needed.

Growing concerns about improving the linkages between public colleges and universities and the wider society

Partly spurred by hard times, state policymakers have become concerned about the "return on investment" represented by public higher education. A well-conceived indicator system can reflect broad changes in societal need and effectively monitor higher education's contributions toward meeting economic and social needs.

Particular concerns about revitalizing undergraduate education in state higher education systems

Through a variety of assessment and improvement programs, many states have urged institutions to engage in ongoing improvement of undergraduate instruction. Used appropriately, indicator systems can help summarize the results of institutional assessment efforts and can both stimulate and monitor the implementation of recognized "good practices" in undergraduate education.

To realize these potential benefits, however, policymakers must be aware that the use of indicators implies a particular model of how state policy is constructed. An approach using indicators first assumes the legitimacy of proactive, state-level intentions and actions with respect to higher education that go beyond the purposes of a single institution. While indicator systems can and have been constructed in the form of "report cards" reflecting the condition and performance of individual institutions, the optimal use of statewide indicators is systemic — that is, designed to guide the development of state-level policy as a whole.

Indicator systems are also meant to be long-term. Relying upon indicators implies an incremental policy approach that stresses continuous improvement rather than quick fixes. This, in turn, implies a rational approach to policy and resource allocation, characterized by the conscious use of concrete information in deciding what can and should be done. An important distinction needs to be made here, however. In using indicators, considerable policy attention must be directed toward determining how a given state's system of higher education functions as a whole and how its individual pieces interact; this differs from using statistics narrowly in an attempt to micromanage individual units, colleges, or universities.

Strengths and Weaknesses of Indicators

There are particular advantages and disadvantages to using indicators as policy tools:

Strengths

- *They can enhance the process of state- and institution-level goal development.* By making intended outcomes more visible and concrete, both educational leaders and the public become more aware of what needs to be accomplished. Explicitly tracking degree-completion rates for minority students, for instance, sends a far more concrete signal about what needs to happen than does the more general goal of increasing access.

- *They can help mobilize concerted action within the higher education community, as well as support for higher education among the public at large.* Concrete indicators provide a better focus for applied policy than do more general directives. Reporting data on lower-division instructional loads and expenditures, for example, creates greater incentives to address directly the problem of lack of resources in the early years of undergraduate study than do more general exhortations to improve quality.

- *They can support and reinforce development of a rational set of state policies and institutional actions directed toward ongoing improvement.* Statewide indicators help document statewide needs and higher education's current progress in meeting them. Comprehensive data about the numbers and proportions of entering students deficient in basic algebra skills, for instance, help make the case for greater investment in remediation and show explicitly the levels, kinds, and locations of resources that will be needed across the state. Similarly, concrete data about state adult literacy rates call attention to the need for higher education institutions to work with other state agencies to address a common work force problem.

Weaknesses

But indicator systems also have drawbacks as policy levers:

- *They seldom tell policymakers and the public directly what they want to know.* By their very nature, practical indicator systems tend to be indirect. Using indicators, policymakers can determine such things as which institutions are investing heavily in undergraduate study, what kinds of resources they are investing, and what many of the outcomes of this investment may be. What they will not have is a reliable single index of higher education quality.

- *They tend to create false short-term incentives for action.* If the stakes associated with poor performance are high, institutions may act to maximize the numeric values of indicators without really changing practice or performance. Placing excessive emphasis on achievement test scores, for example, can strongly induce institutions to admit only the best students in the first place or to eliminate weak students before they are tested.

- *They can focus attention on information-gathering itself, rather than on real action to change conditions.* Because indicators are often technically complex and the changes they point to difficult to implement, excessive institutional effort may be expended on measurement issues unrelated to local improvement. Initiating common statewide basic skills testing, for example, may require significant new institutional investment without eliminating the need for institutions to maintain their own duplicative, local assessment systems.

Like any other policy tool, indicator systems are no panacea. In particular, their appropriate use demands careful planning and significant attention to how the resulting information fits within overall state-policy directions and what kinds of incentives and disincentives they create for institutional action.

WHICH INDICATORS ARE NEEDED FOR HIGHER EDUCATION POLICY?

Many indicators now proposed or in current use at the state level rely heavily on available statistics that are not necessarily the most informative. State higher education institutions and agencies, for example, routinely produce large volumes of statistics about their operations for accountability purposes. Among the most prominent are activity-level statistics such as enrollments and costs. What most legislators and the public want, however, are output or return-on-investment statistics such as degrees granted or retention and completion rates. To avoid creating false incentives for action that do not serve state purposes, policymakers must recognize that appropriate indicator systems must be multiple, comprehensive, and mutually reinforcing.

Appropriate indicator systems can be constructed in many ways, but the best are guided by an explicit model of the assets contained in a state's higher education system and of the functioning of the system itself. At the same time, appropriate indicator systems generally contain data of two kinds: the current condition of higher education as a public investment (e.g., data on the age and deferred maintenance of facilities and capital equipment), and the degree to which particular policy objectives are being achieved (e.g., the rate of minority degree attainment in science and engineering). The first of these corresponds roughly to a business financial statement showing assets and liabilities for the enterprise as a whole, while the second resembles a business operations statement showing profits and losses for a given period. The contents of the first set of indicators will be relatively standard, while those of the second will depend primarily on the specific policy objectives that the state is seeking to accomplish. Both are important for sound decision making.

Approaches to Developing Useful Indicator Systems

These broad parameters, however, can encompass many distinct approaches to developing a useful statewide indicator system. Four approaches are commonly used.

Inputs/Processes/Outcomes

This approach is probably the most familiar and is often used in accountability reporting for K-12 education. Its underlying model is a production process; the primary output to be measured is "value added." Three types of indicators are most typically included:

- Entering student numbers, characteristics, and ability levels

- Per-student instructional expenditures, educational levels and backgrounds of instructors, types of instruction provided (e.g., curriculum design), actual instructional experiences (e.g., class sizes, types of requirements completed, amount of faculty contact), and student behavior (e.g., retention, choice of program, and courses, etc.)

- Exiting-student numbers, characteristics, and ability levels (and the difference between each of these and the corresponding values for entering students)

Resource Efficiency and Effectiveness

As noted, higher education financial data are commonly collected and reported at the state level. For the most part, however, fiscal information has been used to ensure that appropriated dollars are spent legally and as intended. In indicator form, however, resource information can have other important uses. The most common is to monitor efficiency — particularly in the way physical resources such as faculty, space, and equipment are utilized and deployed.

Less common but equally important uses are to monitor the current capacity and condition of critical institutional assets. For instance, have visible gains in output been purchased at the expense of potential long-term effectiveness in the form of deferred maintenance of physical plants or dangerous erosions in faculty compensation in key disciplines? The more prominent types of indicators under this model are as follows:

- Current type, condition, and distribution (across institutions and programs) of key physical assets such as faculty, staff, space, or equipment, and historical patterns in the above

- Patterns in the actual utilization of both fiscal and key physical resources over time — for instance, facilities utilization by type of space, faculty teaching loads and research assignments, or instructional expenditures by discipline and by level

State Need and Return on Investment

Increasingly, both policymakers and the public at large view expenditures on higher education as a strategic investment for the state as a whole, directly related to economic and manpower development and a more publicly aware and socially functional citizenry. This view of higher education suggests a wider set of indicators than those traditionally used. Some of the specific types of indicators included in this model are as follows:

- Current and future work force needs, including types of positions and specific types of work force skills (e.g., oral communications skills, problem-solving skills, or interpersonal skills) required to meet future needs

- The match between identified work force needs and higher education's current capacity to meet them (as shown in existing program capacities and locations, research and instructional emphases, and levels and types of degrees produced)

- Overall changes in work force and citizen capacities for the state as a whole — for example, in levels of education completed or in assessed general skill levels

"Customer" Need and Return on Investment

Extending the notion of return on investment, higher education in any state has a wide range of customers including individual citizens, employers, and the public at large. Increasingly, both state and federal policies emphasize that these parties have a "right to know" about the past performance of colleges and universities. The underlying model here is one of informing consumer choice. The primary focus is determining the degree to which individual needs are met. Specific types of indicators are suggested by this approach:

- Historical rates of persistence, degree-completion, and employment by field of study or type of preparation for entering students of different types

- Job and career mobility of degree recipients by field of study or type of preparation

- Proportion of employees requiring additional education or training to address particular identified skills deficiencies

CHOOSING AMONG THE MODELS

These models are not mutually exclusive. Each provides a different way of looking at the relationship between higher education and its intended purposes. Most, in fact, contain elements either directly included or implied by one or more of the others. The point for policymakers is less to choose among them as much as it is to ensure that those responsible for developing any planned statewide indicator system recognize the need to be guided by an explicit policy framework of this kind.

Regardless of the particular model chosen, effective indicator systems are best developed for a statewide system of higher education as a whole. The primary emphasis should not be on institutional policing through production of a report card, but rather on determining higher education's strengths and weaknesses and identifying how its overall performance might be improved. Effective indicator systems should be constructed to embrace multiple perspectives, including those of individual institutions, students, and such external constituents as employers and citizens. Appropriate policy requires prior consensus both about the goals to be sought and about how their achievement will be recognized by the various interested parties. Often, therefore, the same basic information can and should be communicated in indicator form to different audiences for different purposes. An excellent example is provided by the transfer of two-year college students to four-year colleges and universities. Here, appropriate statistics on transfer might be compiled in at least three ways:

- From the perspective of the individual two-year college — for example, the proportion of degree-seeking students from a two-year college who successfully enroll in baccalaureate programs at a four-year institution

- From the perspective of the state's system of higher education — for example, the proportion of baccalaureate degrees granted by public institutions to students who began their studies at a two-year college

- From the perspective of the individual student — for example, based on past experience, the statistical chances of a student in a particular city drawn from a particular ethnic group completing a baccalaureate degree within six years after prior enrollment in a particular two-year college

None of these potential indicators is inherently right or wrong. The choice of which to include depends entirely on the policy question being asked and from whose perspective.

SOME QUESTIONS THAT POLICYMAKERS NEED TO ASK

Given the above context, policymakers should consider a number of specific criteria as they assess the utility of particular higher education indicator systems. An approach may look good on one dimension, possess severe handicaps in another, yet still be very useful for policy purposes. If it fails to meet too many criteria, however, its use may create substantial future difficulties. In using particular indicators, therefore, policymakers should recognize each system's specific strengths and weaknesses, and they must resist the temptation to view every statistic as equally valid and useful for all purposes. Among the most important questions that policymakers should ask about higher education indicators are the following seven:

1. Does the indicator provide policy leverage for action to correct deficiencies?

Some indicators merely offer information about the present state or condition of higher education without yielding much information about how to improve things; others provide direct guidance about what might be changed. A comprehensive statewide assessment of college-level communications skills, for example, may reliably indicate current levels of proficiency in written communication among college students, but it may also yield little information about what is required to improve performance. In contrast, while a statistic indicating the actual amount of writing required of college students may not show proficiency directly, it can provide much clearer direction regarding possible corrective actions.

2. To what extent is the indicator susceptible to manipulation without real changes in the things that it is trying to measure or reflect?

All indirect indicator systems are to some extent vulnerable to manipulation. As a result, multiple indicators should be designed to reinforce one another, and single indicators should be avoided in most cases, particularly if their values can be easily influenced. For example, statistics on the proportion of instructional expenditures dedicated to delivering lower-division course work depend greatly upon the ways individual courses are classified by institutions. If incentives to perform well on such indicators are compelling, institutions will quickly identify those modes of classification that yield maximum indicator values regardless of what they are actually doing.

3. Is the indicator easily understandable to and credible for lay audiences?

Some indicators are the result of complex statistical manipulations that say little directly to those unschooled in their interpretation. Others are "face valid" for most observers — they not only measure what they are supposed to measure, but they look like they do so and thus are able to communicate readily to lay audiences. Statistics on program completion rates or interinstitutional transfer rates, for example, are notoriously complicated when compared to more straightforward numerical information such as enrollments or numbers of faculty. This is because they depend upon numerous prior assumptions about who should really be classified as a degree-seeking student. In order for such statistics to be useful as indicators, their grounding assumptions and definitions need to be clearly visible to all who examine them.

4. Does the indicator reflect the perspectives and concerns of multiple constituents?

A good indicator system will contain several units of analysis, drawn from a range of client perspectives, including the student, the institution, and the system as a whole. Because consensus is required for meaningful action, the contents of any indicator system should potentially support the establishment of an informed dialogue among the appropriate parties. A statistic on the employment rates of program completers by field of study, for example, can be summarized from the student's point of view as the probability of being placed, from the college or university's point of view as a placement rate, and from an employer's point of view as the proportion of needed job areas filled each year.

5. Against what benchmark will the indicator be compared in order to chart success or progress?

Without a clear standard for comparison, the interpretation of any indicator is subject to considerable doubt. Indicators may be measured by direct comparisons among institutions, comparisons with identified peers, cross-state comparisons, or comparisons against established "best practices" or national norms. Indicators of faculty workload at a particular research university, for example, can be compared across a range of nationally identified peer institutions in order to establish its position with respect to industry standards for that type of institution. But the same statistics might be compared across all state institutions regardless of type as an indicator of their appropriate mission differentiation.

6. To what extent is the indicator reliable and valid as a piece of data in itself, and how robust is it under typical conditions of missing or biased data?

To be used in planning policy, indicators need to be founded upon valid and reliable measurement procedures, but they should also be designed to operate under less-than-ideal measurement conditions. Complex longitudinal data-reporting requirements, such as the proportion of entering students who complete a particular program of study within a defined time period, may be highly vulnerable to deficiencies and variability in institutional record-keeping procedures.

7. To what extent is the indicator practically obtainable at a reasonable cost?

Many promising indicator systems fail simply because they are too expensive, too complex, too time-consuming, or too politically costly to implement. Often the simplest is the best, even if it initially seems less technically attractive. Large-scale direct assessments of generic student abilities, as currently practiced in K-12 education for instance, are conceptually compelling as indicators, but they require heavy initial resource commitments for instrument development and may also require the expenditure of considerable political capital in order to overcome inevitable institutional resistance. Indirect indicators of curricular and teaching practice may be easier to collect and be just as useful for policy purposes.

CONCLUSION

In sum, indicators work best as tools of public policy when a wide range are developed and when they are clearly related to particular elements of system-level purpose. In using indicators, moreover, it is important to consider overall patterns and avoid focusing on small differences, which may result from unimportant local variations or simple chance. Most important, however, indicator systems should not be used to make final summative judgments. Instead, they should be employed to start discussions about concrete, systemic improvement. As industry has shown with the process of Total Quality Management, information is most valuable for improvement when it serves as a point of departure for improvement, rather than after the fact to determine whether any has taken place. The best indicator systems help students, institutions, and policymakers at all levels to recognize and take responsibility for their actions and accept the consequences. As experience in many public policy sectors has shown, it is only when responsibility of this kind develops naturally that real improvement occurs.

COLORADO

Gordon B. Van de Water

OVERVIEW

Colorado was among the first case-study states to initiate higher education accountability as one of the major provisions of an omnibus higher education bill passed in 1985. As in other states, state-level assessment began as a decentralized effort. In consultation with public institutions, the coordinating board developed reporting guidelines and general assessment domains. Institutions were asked to develop specific assessment measures appropriate to their individual missions. After several years of institutional reporting, the coordinating board established the annual "Scorecard" to standardize measures of student and institutional performance. The Scorecard reports indicators by institutional sector (i.e., research universities, universities and colleges, and community colleges) and compares Colorado standings with those of other states.

Colorado's assessment activities have resulted in institutional program improvement and better coordination among campus assessment administrators and coordinating board staff. The Scorecard has met a pressing need for greater accountability. Legislators likely will continue to push for assessment measures that are more easily quantifiable and allow for institutional and programmatic comparison.

CHRONOLOGY AND CONTEXT

System Design and Evolution

The Colorado Commission on Higher Education (CCHE), Colorado's statewide higher education coordinating board, was established in 1965, long after individual colleges and universities had developed their own identities and means of interacting with state government. Initially, CCHE was a weak newcomer with little clout. Caught between institutional leaders looking for an advocate in the state capital and elected leaders concerned with limiting institutional aggrandizement, CCHE had difficulty establishing its niche in the public policy arena. With the passage of an omnibus higher education bill in 1985 (House Bill 1187), however, the role of CCHE was strengthened and higher education accountability requirements were established.

The higher education system for which CCHE has planning and policy responsibility consists of the multi-campus University of Colorado, governed by the publicly elected University of Colorado Board of Regents; the multi-campus Colorado State University system, governed by the State Board of Agriculture; the University of Northern Colorado and the Colorado School of Mines, each governed by its own board of trustees; 4 state colleges governed by the Trustees of the Consortium of State Colleges; 11 state-sponsored community colleges under the control of the State Board of Community Colleges and Occupational Education; and 4 local district colleges. In 1992, these 28 institutions served more than 168,000 Colorado residents and awarded 27,017 degrees.

ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

Since 1985, CCHE has been fully occupied with fulfilling the many responsibilities of HB 1187. The Higher Education Accountability portion of HB 1187 begins by declaring the intent of the general assembly in the following words:

(a) That institutions of higher education be held accountable for demonstrable improvements in student knowledge, capacities, and skills between entrance and graduation;

(b) That these demonstrable improvements be publicly announced and available;

(c) That institutions express clearly to students their expectations of student performance; and

(d) That these improvements be achieved efficiently through the effective use of student and institutional resources of time, effort, and money.

The statute also specifically mandates that colleges and universities "design and implement a systematic program to assess the knowledge, capacities, and skills developed by students in academic and co-curricular programs." According to CCHE, this legislation calls for both assessment and accountability:

> [while the legislation] was primarily designed to be "assessment" oriented, i.e., gathering information about the performance of students, it also established an expectation of "accountability" by requiring institutions to publicly disclose the results of student assessment.[1]

These dual purposes of assessing students and holding institutions accountable has led to some confusion about the nature of the program and the purposes for which its results are used.

As developed by CCHE in cooperation with the institutions of higher education, the process has five parts:[2]

1. A CCHE assessment policy that requires each institution to assess general education, disciplines, retention/graduation, after-graduation success, and student/alumni satisfaction

2. Institutionally developed goals for undergraduate education, a plan for assessment, and assessment measures for each of the above areas

3. An annual reporting cycle, beginning in 1989, during which each institution reports its results to CCHE

4. A CCHE review and comment process that provides constructive criticism to institutions and seeks common threads that might lead to statewide policy changes

5. An annual report to the legislature by CCHE on progress toward the objectives outlined in HB 1187

Three years into the reporting cycle, a content analysis of the 112 institutional reports submitted to date reveals that colleges and universities use assessment for program improvement and not simply as an exercise to comply with a statutory mandate. Specific results include the following:

- Faculty are increasingly involved in interpreting assessment data and developing changes based on it

- Assessment results are fostering an increasing rate of change in courses and instructional methods as well as in support services

- Assessment measures are evolving into a test of the application of knowledge rather than rote memory

- Changes designed to improve teaching and learning are becoming more common as faculty become more comfortable with the tools of assessment

- Institutions are meeting the assessment goals of the statewide coordinating board

In 1992, during the development of CCHE's new master plan, CCHE reviewed the higher education accountability program and concluded that it "appears to be satisfactorily achieving its objectives at this point in time."[3] As CCHE noted, even institutions that generally resisted state-level mandates seemed to consider assessment activities valuable:

> Individual campuses use the results of assessment to make curriculum changes that improve instruction, and ultimately, student learning. The assessment process itself can be a useful tool to ensure dialogue about curriculum both within and between academic areas. . . . Assessment can also help to shift institutional focus from research to instruction. As another faculty member recently observed, What gets evaluated is what gets noticed.[4]

STATE-LEVEL INDICATORS

HB 1187 mandates institutional participation in assessment and accountability but provides wide latitude in developing approaches suitable for each individual institution. From the beginning, institutions were expected to develop assessment programs addressed to each institution's stated objectives for undergraduate education. While the statute describes in general what colleges and universities are to assess, the only additional requirement is that "the instruments and methods used [be] appropriate. . . ." As a result, institutions have chosen a variety of assessment techniques to accomplish the state mandate, including the Major Field Assessment Test (MFAT), student portfolios, senior capstone projects or seminars, performance assessment, and a variety of surveys:

- At the University of Colorado at Boulder, the 1990–91 accountability report provides 53 pages of detail on how 41 departments, programs, schools, and colleges carried out outcomes assessment plans. The report covers everything from an alumni satisfaction survey to the ability of kinesiology students to interpret scientific journal articles.

- Colorado State University uses the ACT-COMP to establish a clear picture of their undergraduates. Five years of results indicate that CSU students score above the national norm in five categories and at the norm in one category. Results have been used to develop local assessment procedures.

- At Metropolitan State College of Denver, after-graduation performance evaluations by employers show very high ratings for graduates in the areas of ability to learn, sense of responsibility, and initiative. Lower scores were reported for leadership skills, speaking, and writing.

While these institutional reports correspond to a CCHE list of criteria, thereby providing some continuity, one outcome of this approach has been "campus-specific" institutional reports that cannot be aggregated into state-level indicators. In order to provide the public with a standardized measurement of performance of students and institutions, CCHE worked with the governor's office, key legislators, and institutional leaders to develop the *Scorecard on Colorado Public Higher Education: How the Public Higher Education System and Its Students Perform on Selected Measures*. Organized around four systemwide educational values, the Scorecard started with 15 measures:

Value 1: Educational Excellence

Measures:

- ACT and SAT test scores of first-time freshmen
- Performance of Colorado graduates on graduate and professional school examinations
- Average faculty salary

Value 2: Educational Access and Diversity

Measures:

- Availability of academic programs
- College participation rate
- Graduation rates by ethnicity
- Availability of student financial aid
- Faculty diversity

Value 3: Efficiency in the Delivery of Education

Measures:

- Student/faculty ratios
- Sustained financial commitment to instruction

Value 4: Adequate Resources for the Delivery of Education

Measures:

- Total revenues per student
- Alumni and private contributions
- State appropriations per resident student
- State appropriations per capita
- Grant and contract dollars per faculty full-time-equivalent (FTE)

In addition to these measures, future reports will include items on student satisfaction, alumni satisfaction, employer satisfaction, academic performance of two-year transfer students, and administrative costs as a percent of total costs.

The final section of the Scorecard, "Recent Trends," provides contextual information on enrollments, degrees granted, appropriations, and tuition revenue. This information is helpful in interpreting the indicators.

REVIEWING AND REPORTING OF RESULTS

The Colorado Higher Education Accountability Program (HEAP), mandated by HB 1187, requires annual institutional reports to be made to CCHE regarding the status of implementation efforts; these reports are to be compiled by CCHE into a statewide student-outcomes assessment report. In complying with this requirement, both CCHE and the institutions encountered initial difficulties.

The first round of reports (February 1990), for example, received poor grades from CCHE commissioners, primarily because they felt that institutional responses suggested that institutions were not taking the assessment mandate seriously. This led to a period of intense activity that served both to enlighten CCHE commissioners about the difficulties of launching assessment efforts and to strengthen working ties among CCHE staff, members of the CCHE Academic Council, and institutional assessment coordinators. These close working relationships proved beneficial in improving the reporting process in subsequent years.

A second difficulty arose concerning the interpretation of institutional accountability. Because each institution had built its own assessment plan as it deemed appropriate, reports did not easily combine to create a set of state-level indicators. While seen as wholly appropriate when viewed through institutional eyes, it was a decided shortcoming to legislators interested in comparing institutional performance. While CCHE had consistently advocated the need for individual institutions to design and implement their own assessment programs, it also recognized the accountability interests voiced by state policymakers. To address these concerns, CCHE developed two responses.

First, beginning with the third annual report, CCHE went beyond summarizing institutional assessment efforts to tease out issue areas with statewide policy implications. Three issues were identified:

Teacher Education Programs — Because CCHE believed that "institutions have not developed meaningful assessment techniques for teacher education programs,"[5] college of education deans were designated as responsible parties to address this issue. Discussions are currently underway.

Effectiveness of Basic Skills Instruction — Basic skills instruction surfaced as a result of information reported by three community colleges on student outcomes. The issue is being addressed by the Basic Skills Committee of the statewide community college board.

Minority Retention/Graduation Rates — The issue of minority retention/graduation rates persists despite years of CCHE emphasis on affirmative action. CCHE plans to expand its efforts to share successful models from other institutions together with staff assistance with developing cultural diversity plans.

CCHE's second response was to develop and publish the annual Scorecard referred to in the previous section. The Scorecard does not report on individual institutions. Instead, institutions are grouped into three sectors: research universities, universities/colleges, and community colleges. Although this approach does not permit individual institutional comparison, it provides a mechanism for reporting basic indicator information consistently over time without interfering with campus-based assessment practices. Initial experience shows that the Scorecard is not used frequently by the public, but it is used as a background source by the media and elected officials, although the latter would prefer to see data presented by individual institutions for direct-comparison purposes.

Other kinds of assessment activities — institutional program review, accreditation, and CCHE special focus reports and policies — also produce assessment information, some of which is used in the Scorecard. Coordinating these assessment activities at various levels leads to an efficient system that serves the needs of both the campus and the capital. Some campuses use assessment findings in subsequent program reviews, while some connect assessment activities more closely to accreditation reviews. Assessment data are also beginning to be used in the planning process as leaders develop trust in the data. To date there have been no direct connections to the budget process. There is, however, interest in examining the range of assessment activities to determine where reporting requirements can be merged and/or reduced.

CONNECTIONS TO OTHER PROCESSES

HB 1187 made one very explicit, punitive connection between assessment activities and money:

> Commencing July 1, 1990, the commission is authorized to retain a sum not in excess of 2 percent of the appropriation for any institution which has not implemented or is failing or

> refusing to some degree to implement any part of the higher education accountability program or fails to comply with the policies and standards of the commission.

The former CCHE executive director felt this rule initially played a useful role in motivating institutions to take assessment and accountability efforts seriously. To date, CCHE has not invoked this "two percent rule." But, as educational analysts Francis Griffith and Stephanie Cunningham point out, the commissioners came close on one occasion:

> Commissioners were distressed by the small amount of data provided by the colleges and universities, especially the lack of data showing trends in student performance over time. This situation led them to believe that the schools were not taking the assessment mandate seriously. Unhappy Commissioners threatened to recommend that the Legislature withhold up to 2 percent of state funds from certain institutions.[6]

As previously noted, connections to program review and accreditation are now beginning to develop at the campus level. At the state level, Goal Six of the new *Colorado Higher Education Master Plan* calls for strengthening "higher education's accountability to the citizens of Colorado by continuing to implement meaningful programs of assessment" and beginning to "[integrate] assessment with other policies that monitor quality, streamline procedures, and reduce associated costs." As of this writing, these efforts are under discussion and do not yet include the budget process.

IMPLEMENTATION PROBLEMS

A top-down mandate is never warmly welcomed by those responsible for delivering any social service, and higher education is no exception. One early and predictable reaction from campus faculty was a search for hidden agendas on CCHE's and/or the legislature's part. Faculty suspected that assessment results might be used to eliminate academic programs. They were wary that initial institutional flexibility would soon give way to a standard assessment format imposed on all 28 public institutions, with the data used to punish a particular campus. They doubted the state's ability to use assessment results prudently; would the state, they wondered, resist the temptation to make inappropriate comparisons among programs or campuses? In addition, this new assessment program seemed similar to another CCHE accountability initiative called Program Review. Faculty were unsure whether the two processes were connected.

Initial fears eventually settled into substantive discussion regarding each institution's comprehensive assessment plan. In spring 1989, CCHE approved the plans submitted the previous fall. In October, the first annual implementation report came due, and in February 1990 CCHE's first annual statewide report was presented to the CCHE commissioners.

The commissioners' negative response to the report led to earnest efforts to improve the reporting process and to create better working relationships between CCHE staff and campus assessment coordinators. By the second annual report, all players understood the rules of the game, and CCHE commissioners responded positively to the new reports. Subsequent discussions centered on further improvement to the process, refinement in the reporting requirements and cycles, and creation of positive incentives for institutions with a record of exemplary performance.

CONCLUSION

In Colorado the emphasis appears to be on the slow process of changing campus culture through the introduction of new forms of assessment and the use of results to change both student and institutional assessment. At CCHE, the view is that this change will take one to two decades but will fundamentally alter the nature and quality of the information used to assess performance. CCHE staff see this as a process that will lead to substantial improvement in both student and institutional performance. In this sense, they are deliberately "going slow to go fast." Although the measured pace and lack of comparability frustrates some legislators, results to date indicate that campus leaders find assessment to be increasingly useful. A future challenge will be protecting the decentralized approach that promises real long term results while still developing measures of accountability useful and informative for elected leaders.

NOTES

1. CCHE, Master Plan Background Paper: "How Can Postsecondary Education Be More Accountable to Colorado Citizens?" (Denver: CCHE, September, 1992), p. 3.

2. This section borrows heavily from Stephanie J. Cunningham's article, "Implementing an Accountability Statute," prepared for presentation at the AAHE Assessment and Continuous Quality Improvement Conference, June 9–12, 1993.

3. "How Can Postsecondary Education Be More Accountable to Colorado Citizens?" p. 11.

4. "How Can Postsecondary Education Be More Accountable to Colorado Citizens?" p. 4.

5. CCHE, "1992 Student Assessment Report" (Denver: CCHE, 1992), p. 12.

6. Francis A. Griffith and Stephanie J. Cunningham, *Three Years Into Mandated Student Outcomes Assessment: Some Learnings at the Institutional and System Levels* (Denver: CCHE, 1992), p. 6.

FLORIDA

Gordon B. Van de Water

OVERVIEW

Florida came early to the assessment of student learning by establishing the College Level Academic Skills Test (CLAST) in 1983. CLAST is a "rising junior" exam that tests basic verbal and mathematics competencies. Unlike other case-study states, Florida did not establish assessment in the mid-to-late 1980s for the primary purposes of institutional improvement. Rather, in 1991, the legislature passed accountability legislation for the state university and community college systems. Legislative intent was to "monitor performance at the system level" in instruction, research, and public service. The statutes were explicit about the general areas to be measured: academic productivity, efficiency, quality, and equity. The Postsecondary Education Planning Commission (PEPC), an advisory group to the Florida State Board of Education, proposed general goals for statewide measures, including indicators that were to be related to specific state goals, contain key measures for each goal, allow for comparison with peer systems, and be reported to the public in an understandable format.

CHRONOLOGY AND CONTEXT

System Design and Evolution

Prior to 1945, Florida had only 2 public two-year colleges and 3 public universities. In response to rapid population growth since World War II, however, Florida created 26 new community colleges and 6 public universities (a seventh will be opened before the turn of the century). During this period, the emphasis clearly was on providing expanded educational opportunity through the provision of additional spaces for students.

This rapid expansion led to basic alterations in the governance arrangements for higher education. Since 1985, the chief policymaking and governing body for public education in Florida has been the Florida State Board of Education.[1] Its powers were amended in 1968 to reflect the growth of the state's colleges and universities.

In 1965, the expanded public university sector came under the statutory jurisdiction of the newly created Board of Regents of the State University System, which was given responsibility for planning, institutional budget review, the systemwide legislative budget request, and program approval. In 1983, the State Board of Community Colleges was formed and charged with "establishing and developing rules and policies which will ensure the operation and maintenance of a state community college system in a coordinated, efficient, and effective manner."[2]

Advising the State Board of Education is the Postsecondary Education Planning Commission (PEPC), created in 1980 and charged with preparing a master plan for postsecondary education every five years. Other responsibilities include "recommending to the State Board of Education program contracts with independent institutions; advising the State Board regarding the need for and location of new programs and branch campuses of public postsecondary institutions; reviewing public postsecondary education budget requests for compliance with the State Master Plan. . . ."[3]

The State University System Board of Regents, the Community College Board, and PEPC are each required to prepare master plans intended to guide future development of postsecondary education in the state. Although educators expend much effort in this planning, the results have not been used consistently in the legislative process. According to a PEPC report, when it comes to legislative policy formulation, "relationships between legislators (and legislative staff) and higher education professionals have been characterized by more than the usual skepticism. Consequently, legislation tends to be more specific and constraining than in many other states."[4]

Student Demographics

While similar in appropriations per full-time-equivalent (FTE) student, higher education in Florida differs from its counterparts in other similar-sized states by having fewer colleges and universities, lower participation rates, lower tuition levels, and much higher enrollment growth. Currently, Florida's 9 public universities enroll approximately 100,000 FTE students, and its 28 community colleges approximately 200,000 FTE students. Most Floridians begin their college careers at a community college. Florida has no state colleges. Annually, state universities enroll approximately 12 to 14 percent of the recent high school graduating class.

Within this enrollment, African-American students are significantly underrepresented. Although approximately 20 percent of Florida's high school graduates are African-American, they represent less than 14 percent of the full-time postsecondary enrollment and earned fewer than 7 percent of the degrees awarded in 1991–92. Hispanics, on the other hand, are enrolled much more closely in proportion to their presence in the overall population and achieve degrees at rates similar to those of the Caucasian population.

Chronology of Related Priorities and Initiatives

The Florida State Legislature has been the primary initiator of assessment activities. The legislature took its first formal steps towards a mandated testing program in 1979 when it directed the State Board of Education to adopt minimum academic standards for college students in the areas of communication and computation.

Acting on the 1979 directive, the board created the Articulation Coordinating Committee to oversee the standard-setting process. This committee created another entity called the Essential Academic Skills Project, charged with recommending standards generated through faculty and institutional involvement. Using results from more than 2,600 faculty and staff surveys, a statewide task force developed a list of essential skills that college students must attain. Following a round of review and comment, a final list of competencies was adopted by the statewide task force in December 1980.

At the same time, the Standing Committee on Student Achievement reviewed commercially available testing materials and concluded that no tests existed that could adequately measure student achievement of the types of skill that the statewide task force had identified. This led to the formation of the College Level Academic Skills Project in 1981, designed to develop, implement, and maintain a sophomore-testing program. A revised list of competencies was approved by the board in September 1981 and served as the basis for the development of the College Level Academic Skills Test (CLAST), the "rising junior" exam required of all college sophomores since 1983.

CLAST passing scores were phased in during the period from 1984 to 1989. Over time, passing scores for reading were raised. The scale for evaluating writing skills scores was revised also, with the overall effect of raising the minimum needed to pass the essay portion of the test. The mathematics scores were only partially raised, however, after concerns were expressed by legislators, community college presidents, and other educators about potential adverse impacts on student completion rates.

During 1988, external consultants reviewed CLAST and found it to be reasonably reliable and valid. They found no evidence of gender, ethnic, or racial bias.[5] At the same time, they suggested that the test's degree of difficulty might be more appropriate as a measure of entry-level basic skills rather than those expected of college sophomores. PEPC described the study this way:

> Since its inception the College-Level Academic Skills Test (CLAST) has generated a tremendous amount of interest and effort at both the state and institutional level on the part of students, faculty, administrators, and policy makers to place a renewed emphasis on the importance of general education. . . . The Commission continues to believe that performance will rise to meet expectations and that diminished standards do no service to those who may initially experience difficulty with the test.[6]

Since CLAST is required for admission to the upper division, it is one means of assessing student performance prior to the start of upper division work. In addition, Florida has addressed issues of transfer and articulation as a way to enhance the flow of students through the system and increase institutional efficiency and effectiveness.

SYSTEM AND STATE-LEVEL INDICATORS

As with other student assessment efforts, accountability measures in Florida originated in the Florida legislature. The 1991 legislature passed two bills aimed at implementing an accountability process for both the state university and community college systems. In addition, proviso language in the 1991 appropriations bill directed PEPC to "conduct a review of the status of outcomes assessment in Florida in comparison with model practices in place in other states, individual institutions and accrediting bodies."[7] The remainder of this case study describes these three legislative actions and resulting events.

The State University Accountability Legislation

Section 240.214 of Florida's education law expresses the legislature's intent as follows:

> It is the intent of the Legislature that an accountability process be implemented which provides for the systematic, ongoing evaluation of quality and effectiveness in the State University System. It is further the intent of the Legislature that this accountability process monitor performance at the system level in each of the major areas of instruction, research, and public service, while recognizing the differing missions of each of the state universities. The accountability process shall provide for the adoption of systemwide performance standards and performance goals for each standard identified through a collaborative effort involving the State University System, the Legislature, and the Governor's Office.[8]

The legislatively mandated accountability process required the board of regents to prepare the following:

1. An evaluation of the production of classroom contact hours to be completed by December 31, 1991 and annually thereafter
2. An accountability plan by October 1, 1991
3. An annual accountability report, beginning December 1, 1992

Finally, the act specified that beginning January 1, 1993, "the Board of Regents shall conduct an annual evaluation of the performance of the Chancellor and the state university presidents in achieving the performance goals established in the State University System accountability plan. . . ."

The indicators required by the statute cluster around four issue areas: (1) academic productivity (including credit hours produced, degrees awarded, and contact hours of instruction); (2) efficiency (including length of time to degree, number of credits required for a degree, and classroom utilization); (3) quality (including pass rates on professional licensure examinations and ratings of alumni, parents, clients, and employers); and (4) equity (enrollment, progression, retention, and graduation rates by race, gender, and disability). In addition, the statute gives the following direction to the Office of the Auditor General to:

> conduct an assessment of the State University Accountability plan . . . which must include the following components:
>
> 1. Evaluation of the extent to which the performance standards included in the plan are valid, reliable, and can be measured;
> 2. Assessment of controls and procedures to be established . . .;
> 3. Evaluation of the year, established by the State University System, which shall serve as the data base line for each performance standard; and
> 4. Assessment of the basis of the weighted value formula, established by the State University System for each performance standard.

The auditor general's report of December 31, 1991, generally approved of the system's approach to implementing the accountability statute but identified several data concerns and recognized the need to expand the assessment to the graduate, research, and service missions of the state's public universities.[9]

The Community College Accountability Legislation

Passed during the same session (1991), the community college legislation stipulated a somewhat different accountability plan:

> It is the intent of the Legislature that a management and accountability process be implemented which provides for the systematic, ongoing improvement and assessment of the improvement of the quality and efficiency of the State Community College System.[10]

This legislative mandate required the State Board of Community Colleges to (1) prepare an accountability plan by January 1, 1992; (2) implement the plan by December 31, 1994; and (3) submit annual reports beginning December 31, 1992.

In addition, beginning January 1, 1993, the executive director of the State Board for Community Colleges and the president of each college are to include in their annual evaluations a section on the achievement of the performance goals established in the community college accountability plan. For community colleges, institutional-effectiveness indicators required by the statute cluster around the same four issue areas as for the universities but specified differently. The indicators by issue area are (1) academic productivity (including graduation rates of associate degree-seeking students compared to first-time enrolled students), (2) efficiency (including job placement rates of vocational students and student progression by admission status and program), (3) quality (including student performance on CLAST examinations, grade-point average for transfer students, and performance on licensure examinations), and (4) equity (minority student enrollment and retention rates). Unlike the state university statute, the community college statute does not contain any requirement for a review by the Office of the Auditor General.

The Postsecondary Education Planning Commission Study

Through proviso language in the General Appropriations Act, the 1991 legislature directed PEPC "to review outcomes assessment in Florida higher education institutions."[11] The study revealed that Florida had no comprehensive state-level assessment policy, and that ongoing, systematic, and comprehensive assessment for the purpose of evaluating overall institutional effectiveness had not been a priority at most colleges and universities. Based on these findings, the commission reached several conclusions:

1. Assessment of educational outcomes should be an integral and continuous part of the functioning of a postsecondary institution.

2. Consistency and comparability of assessment measures are important, and . . . should include . . . instruction, research, and public service.

3. The educational process and student learning should be central to institutional assessment plans.

4. The State needs to address fundamental and systemic issues related to the structure, financing, management, productivity, and delivery of postsecondary education.

5. Conflicting forces internal to the institution, especially the public universities, have the potential of creating impediments to institutions' responsiveness to the needs of such diverse groups as government, business, industry, private organizations and associations.

6. Concurrently, business and industry have a responsibility to determine specifically what their needs are and articulate these clearly to colleges and universities.

These conclusions led to the recommendation that a statewide assessment process be delayed until more fundamental issues of management, structure, productivity, and financing could be resolved through the master planning process. In October 1993, PEPC completed the new *Master Plan for Florida Postsecondary Education*. Each issue was addressed in the plan, and it was reaffirmed that accountability was to remain the principal way of responding to productivity questions. In addition, assessment of state and institutional missions as well as accomplishment of goals was to be an integral part of postsecondary education. PEPC called on state-level governing and coordinating boards to provide guidelines and assistance to their institutions in designing and implementing a comprehensive outcomes-assessment program to examine institutional effectiveness.

Florida is currently working toward a set of state-level indicators. At this time, the closest approximations are the system-level performance standards required by the 1991 statutes described above. For the State University System, the accountability plan "must include, at a minimum, data on the following performance standards":

1. Total student credit hours produced, by institution and by discipline

2. Total number of degrees awarded, by institution and by discipline

3. Total number of contact hours of instruction produced, by faculty, by institution, rank, and course level

4. Pass-rates on professional licensure examinations, by institution

5. Institutional quality as assessed by follow-up surveys of alumni, parents, clients, and employers
6. Length of time and number of academic credits required to complete an academic degree, by institution and by degree
7. Enrollment, progression, retention, and graduation rates by race, gender, and disability
8. Student course demand analysis
9. Classroom utilization

The State University System's accountability plan, dated October 1, 1991, interprets the legislative language in the following words. The emphasis is to be "principally on undergraduate education. None of these measures is directed primarily towards graduate and professional education, to say nothing of research or service. . . . Thus, this report should be viewed as just the first phase in an evolutionary process that will eventually encompass the entire mission of our State University System." Perhaps because of limited time, the plan does not exceed the minimum requirements of the statute. Full implementation of the process was expected to be complete by December 31, 1993.

For the community college system, the accountability plan was to address the following issues:

1. Graduation rates of AA and AS degree-seeking students compared to first-time enrolled students seeking the associate degree
2. Minority student enrollment and retention rates
3. Student performance, including student performance rates on college level academic skills tests, mean grade-point averages for community college AA transfer students, and community college student performance on state licensure examinations
4. Job placement rates of community college vocational students
5. Student progression by admission status and program
6. Other measures as identified by the Postsecondary Education Planning Commission and approved by the State Board of Community Colleges

The *Florida Community College System 1992 Accountability Report* summarizes the work of the Accountability Implementation Committee during 1992. The two main outcomes of this effort were the establishment of a timeline for implementation and the development of "outcome measures that address the central issues adopted in the legislation." Like the state university system, the community college plan does not go beyond the minimum required by the legislation. The report notes that "numerous other processes exist and are under development to address the issues of accountability" and encourages diverse agencies to use common data definitions and reporting formats to meet multiple requirements as a way of using resources most efficiently. The report also comments that "no specific funding to support the development and implementation of this plan has been provided to the colleges or to the Division of Community Colleges." The state board had unsuccessfully requested funding in 1992–93 (the 1993–94 request is for $2.73 million). While reaffirming commitment to accountability, PEPC concluded the report by noting the difficulty created by a lack of funds:

> If additional funding is not provided, the committee and the system are committed to developing alternative procedures and outcome measures that would address the issues in the accountability statutes. However, the outcome measures developed in this document are considered to be the most reliable, effective method of assessing the success of the colleges and students.

NEXT STEPS

Clearly, there is legislative interest in developing statewide accountability measures for postsecondary education in Florida. PEPC is currently working toward an approach acceptable to all interested parties. Part of the problem is understanding what is being sought; another is finding common language to talk about it. PEPC is currently circulating a draft concept paper designed to clarify terms, set a framework, and develop a statewide approach to accountability. Key terms are defined as follows:

> For purposes of this paper, *accountability* will be viewed as externally focused — providing information that responds to requests from such sources as state government and regulatory or licensing agencies. *Assessment* is internally focused — producing and using data and other types of information to evaluate processes and procedures in higher education. The results of *assessment* activities in a college or university can be used to respond to *accountability* demands. Because outcomes assessment has been perceived as a powerful force for change, specifically as a vehicle for improving the quality of education, legislators and educators have

> focused on outcomes assessment as the way to achieve accountability as well as to enhance planning and quality improvement [italics in original].[12]

The general conceptual approach posited by PEPC is stated below:

> Accountability is usually perceived as a top-down activity, where an agent external to the postsecondary institutions requires that those institutions be answerable for their activities. However, accountability should occur on two levels: the state level and the institutional level. Thus, both the State and the individual institutions are held accountable to the citizens of the State. The purposes of accountability for the State and the institution are related but are not exactly the same. At the state level, the primary purpose is oversight to guide the educational system toward improvement and achieve public reporting. At the institutional level, the primary purpose of accountability is to improve the effectiveness and efficiency of the institution. In the final analysis, accountability should direct institutions and the state toward improvement. [13]

To encourage consistency and common understanding in accountability, PEPC suggests an explicit state-level accountability policy designed around "a few broad, long-term goals and a few indicators that focus on what is most important and that show how we are doing as a State on those few goals." These goals call for policy (1) to be based on the mission statement of the state's postsecondary education system, (2) to be directed to a few specific state goals, (3) to provide key measures for each goal, (4) to include information that shows system performance at a single point in time as well as changes in performance over time, (5) to allow for comparison with peer systems, (6) to evaluate the quality of the process as well as the inputs and the products, (7) to include assessment of the achievement of general education objectives by undergraduate students, and (8) to be reported to the public in understandable format.

The paper includes a discussion of accountability at the institutional level, recognizing the variety of accountability measures that have been used for years and supporting the need for institutional measures to be more numerous and variable in recognition of local needs and differing missions and goals. The general philosophy underlying state-level accountability efforts is summarized in the conclusion:

> Accountability should be an integral and continuous part of postsecondary education and another tool for educators and policy makers to use for informed decision making. Accountability should not drive education, but it should support education by drawing on information to respond to legitimate questions about what colleges and universities do and how well they do them.

As Florida struggles to develop a comprehensive state-level indicator approach, it seems likely that whatever measures are finally adopted will include some form of comparative data among institutions. In addition to the PEPC concept paper, the State University System accountability plan explicitly recommends such an approach for its institutions:

> Florida's universities represent institutions in differing stages of growth, development, and mission so that simple comparisons within the state yield inaccurate evaluative results. Instead, each university should establish appropriate external institutional counterparts (e.g., a group of top ten peer institutions for each university) for whom comparisons can serve as a yardstick of performance.[14]

It is less clear what, if any, other kinds of contextual data will be incorporated. Given the emphasis on planning and goal setting among Florida educators, it also can be expected that accountability measures will be related to institutional and sector goals, as expressed in master plan documents currently being updated by the two systems and PEPC. With the base provided by the 1991 accountability statutes for each system, it also seems likely that both quantitative data and qualitative measures (especially surveys of various constituent groups) will be used.

CONNECTIONS TO OTHER PROCESSES

Linkages to Budget

The possible use of budgetary incentives or penalties is being discussed in relation to state-level accountability processes. Recent statements in the new master plan suggest several strategies that tie budgetary incentives to accountability. For example, in the section concerning instruction, the commission suggests ensuring that tenure, salary, and promotion criteria appropriately reflect institutional mission. In the management section, the plan proposes incentive funding to attain specified objectives in each sector or across sectors (e.g., increases in minority graduation rates, graduates in economic development occupational clusters, and salary increases tied to attainment of accountability goals). The commission also acknowledges the Division of Vocational, Adult and Community Education for its new performance-based funding model designed to provide incentive funding based on improvements in enrollments, completions, and placements.

Linkages to Planning

There is an overt effort to fit accountability policy discussions within the context of overall planning. PEPC's 1992 report on outcomes assessment makes this link explicit:

> . . . the Commission does not recommend moving to such an assessment process at this time in light of the greater need to use the master plan process during the next twelve months to address fundamental issues of management, structure, productivity, and financing of Florida's postsecondary education system. A result of the Master Plan process should be a definition of the role of assessment and how it should be implemented in the State's postsecondary education system.

This outcome was not realized during the master plan process. It is currently under discussion as part of PEPC's legislatively mandated study on accountability.

CONCLUSION

Florida was an early leader in efforts to assess student performance through statewide testing. It has been less on the cutting edge of efforts to assess institutional performance in a comprehensive state-level approach. In response to legislative initiatives, however, Florida has grappled with state-level accountability. PEPC's current project to design a state-level accountability process will not only provide information for policymakers interested in pursuing improvement but also data that will allow the public to judge how well their colleges and universities are performing against a set of state-level goals. The "Florida approach," however it turns out, will be of wide interest to other states searching for the right balance between external agency need for accountability and internal institutional need for improving performance.

NOTES

1. Unlike other states, Florida's State Board of Education is composed of seven members serving ex officio by virtue of the elective office he or she holds — the governor, secretary of state, state treasurer, attorney general, commissioner of agriculture, state comptroller, and commissioner of education. Constitutionally based, the board serves as the single governing board for all public education in the state. Source: Aims C. McGuinness and Christine Paulson, *State Postsecondary Education Structures Handbook, 1991* (Denver: ECS, 1991).

2. *Structures Handbook, 1991.*

3. *Structures Handbook, 1991.*

4. Augenblick, Van de Water and Associates, "An Examination of the Overall Structure for the Delivery of Public Postsecondary Education in Florida," Final Report to the Structure Committee of the Florida Postsecondary Education Planning Commission (Denver: AVA, January 17, 1990), p. 6.

5. Postsecondary Education Planning Commission, *College-Level Academic Skills Test Review,* 1988, Report 4, (Tallahassee, FL: Postsecondary Education Planning Commission, February 25, 1988), p. ii.

6. *College-Level Academic Skills Test Review, 1988.*

7. Postsecondary Education Planning Commission, *Outcomes Assessment in Postsecondary Education,* 1992, Report 5 (March 1992), p. i.

8. *Outcomes Assessment, p. A-1.*

9. Office of the Auditor General, *Assessment of the State University System of Florida Accountability Plan* (Tallahassee, FL: Office of the Auditor General, December 31, 1991).

10. *Florida Community College System 1992 Accountability Report*, Appendix A.

11. Postsecondary Education Planning Commission, *Outcomes Assessment in Postsecondary Education: Report and Recommendations of the Florida Postsecondary Education Planning Commission*, 1992, Report 5.

12. Postsecondary Education Planning Commission, "Draft Concept Paper: An Accountability Process for Postsecondary Education," July 21, 1993, p. 3.

13. "Draft Concept Paper," p. 6.

14. State University System of Florida, "Accountability Plan," October 1, 1991, p. 28.

ILLINOIS

Richard C. Richardson, Jr.

OVERVIEW

Planning and development of state-level indicators are linked closely in Illinois. Because these efforts are inextricably tied, it is difficult to document their evolution over time. Over a number of years the Illinois Board of Higher Education has established working groups of board staff, trustees, and institutional representatives to study such priorities as undergraduate education, work force needs, productivity, diversity, faculty roles and responsibilities, and affordability. In most cases, assessment measures are an integral part of these efforts. For example, recommendations of a productivity committee led to examination of institutional programs, which, in turn, resulted in recommendations to eliminate, consolidate, or reduce 190 programs. All assessment activities profiled in this case study were initiated by the coordinating board, which produces reports summarizing system and institutional effectiveness in identified areas. In many cases, national data sources are used to assess the health of Illinois higher education.

Beginning in 1991, the board undertook the *Priorities, Quality and Productivity* (PQP) initiative, under which institutions are required to report annually on progress made in carrying out productivity improvements. The board also produces an annual report summarizing statewide progress on productivity goals. Even though Illinois is still in the beginning stages of state-level reporting, linking quality measurement with system planning has been successful thus far. To date, the coordinating board has remained ahead of the legislature and governor in initiating accountability efforts.

CONTEXT

System Design

The Illinois system of higher education has 185 degree-granting institutions, 62 of which are publicly controlled.[1] Twelve public universities are controlled by 4 governing boards, each of which oversees at least 2 institutions. Forty-nine community college campuses are governed by 40 local boards of trustees who work with the Illinois Community College Board in carrying out their missions. Illinois' public higher education institutions are coordinated by the 17-member Illinois Board of Higher Education (IBHE), which has statutory authority to develop master plans; approve new programs of instruction, research, or public service; review existing programs; recommend budgetary needs for operations and for capital improvements to the governor and general assembly; administer state and federal grant programs; and approve or disapprove operating and degree-granting authority for nonpublic colleges and universities.[2]

Student Demographics

Illinois public and private institutions serve about 750,000 students each year and award 100,000 certificates and degrees in a full range of academic specialties. Overall, the student body is racially and ethnically diverse, with African-American, Hispanic, and Asian-American enrollments increasing substantially over the past decade. This diversity is not common across institutions, however. African-American and Hispanic enrollments tend to be clustered at the community colleges and at a few urban four-year institutions including Chicago State University, University of Illinois at Chicago, and Northeastern University.

SYSTEM EVOLUTION: INITIATIVES AND PRIORITIES

During the 1960s and 1970s, IBHE developed master plans focused on improving access and health education. The 1976 *Master Plan for Postsecondary Education in Illinois* recognized the need for a new approach to planning. Future attention to goals and priorities was to be handled through a continuous process rather than by issuing successive versions of a master plan. After 1976, IBHE established ad hoc committees in defined priority areas and relied on them to develop recommendations for IBHE adoption. Among the topics considered during the following decade were teacher education, education in the health professions, off-campus programs, operating and degree-granting authority for nonpublic institutions, community college financing and public university tuition, student financial aid, higher education's role in economic development, remediation, the teaching of writing, and baccalaureate admission requirements.[3] Since the mid-1980s, in an era of declining state fiscal support, IBHE has focused on five major goals: maintaining diversity, extending educational opportunities, assuring academic excellence, promoting economic development, and improving cost effectiveness.

Before turning to the central issue of undergraduate education, this case study examines the implications of board actions related to opportunities for underrepresented groups, work force preparation, and productivity improvements.

Opportunities for Underrepresented Groups

In 1985, IBHE established goals to improve minority student high school preparation and graduation rates and baccalaureate retention. There was a particular interest in increasing minority student enrollments in engineering, math, science, and in graduate and professional programs. In 1989, these goals were amplified when the board adopted guidelines for planning and reporting by public institutions. Each institution was required to submit an annual report detailing goals for improving participation and success rates for minority, female, and disabled populations; identifying strategies and programs for attaining goals; and reporting results.

As of today, all public institutions within the system have formulated such plans. They typically include high school articulation and summer bridge programs, remedial and tutorial services, financial support, and the creation of supportive campus environments. Comparable strategies address the needs of women and the disabled. Most institutions have not created specific enrollment or employment goals for underrepresented groups.[4] Recent efforts to improve minority baccalaureate attainment have focused on improving transfer opportunities.[5]

Work Force Preparation

The IBHE initiative on work force preparation was designed to prepare students at all levels of education for productive lives and careers. The initiative emphasized cooperation with business as well as with other education and training providers. Strategies for achieving this goal included improving basic skills through cooperation with the K-12 sector and through adult basic education provided by community colleges, establishing centers for learning excellence in adult basic education at a number of community colleges, establishing regional or statewide centers for emerging technology, financing consortia of higher education institutions to assist small and medium size industries in employing advanced manufacturing technologies, developing technology preparation programs by promoting cooperation between community colleges and secondary schools, and establishing information clearinghouses to disseminate information on job training and employment services.

Reporting procedures to monitor work force preparation include (1) a survey of public university graduates that collects information on the relationship between undergraduate education and employment, (2) an employer feedback system to provide information on graduate success in the workplace (under development), and (3) a process for guaranteeing the skills of graduates of both the occupational and baccalaureate training programs (this is being developed).[6]

Productivity Improvements

In response to gubernatorial concerns and mixed public perceptions about higher education accountability and productivity, IBHE established the Committee on Scope, Structure and Productivity in 1989. Defining *productivity* as including quality, cost effectiveness, and accountability, the committee identified four guiding assumptions for its work: (1) anything currently being done could be done better; (2) improvements should be accompanied by cost savings or, at the worst, no cost increases; (3) new programs and services should be financed by greater efficiency in current operations or by the termination of less important activities; and (4) results should be reported regularly.

In response to the committee's work, IBHE adopted comprehensive strategies. Campus leaders were asked to involve entire campus communities in broad-based efforts to align institutional goals and priorities with those articulated by IBHE and to design strategies to improve campus quality and cost effectiveness. Three reports were identified as essential to keeping track of results. Institutions were asked to prepare a "consumer report" to inform current and prospective students and their parents about student success and satisfaction; they were also to create a "productivity report" to inform the campus community and state officials about quality and cost effectiveness efforts. IBHE prepared the third report to inform the public at large about the goals and conditions of Illinois higher education.[7]

IBHE experimented briefly with these reporting requirements, but all three were replaced under the newly adopted *Priorities, Quality and Productivity* (PQP) initiative. Currently, each institution produces a productivity report detailing campus progress and an annual board report summarizing statewide progress on PQP goals. Under PQP, IBHE constituted itself as a committee of the whole, identifying five initial areas to be studied for productivity improvements. The higher education sectors were asked to carry out an in-depth review of each area and share their results with IBHE. The budget process was identified as the key strategy for addressing priorities and making productivity improvements. Providing institutions with incentives for making productivity improvements and flexibility in implementation was a key part of the IBHE approach to what was a very sensitive process.[8]

The particular areas to be studied were instruction, research and public service, overall academic functions, administrative functions, and state policies affecting higher education. Specific guidelines for reviewing instructional units included student demand, occupational demand, centrality to mission, breadth of offerings, quality of the instructional unit, success of graduates, and program costs. Institutions were expected to use quantitative and qualitative information available to them in examining the priorities, quality, and productivity of their instructional programs, as well as other aspects of their operation. IBHE provided information about student demand, degree production, costs, and a measure of centrality for groups of related programs, with suggested ratings of high, moderate, and low to encourage institutions to consider their offerings in relation to those of other colleges and universities.[9]

By August 1992, IBHE had determined that "productivity improvements . . . are achieved by eliminating low quality and low priority programs and activities . . . to redirect resources to high priorities." To move the process along, the board established 25 guidelines for making improvements in the five key areas. To guard against the possibility that its actions might be interpreted as insensitive to institutional diversity or too directive for a coordinating board, the accompanying discussion recognized that campuses needed flexibility to achieve improvements consistent with individual institutional missions and priorities. Each system and institution was encouraged to weigh collective findings on all guidelines against the judgments of faculty members, administrators, and board members to arrive at decisions about where improvements could be made and when.[10]

At the October 1992 board meeting, based on an analysis of the productivity of instructional units, IBHE staff recommended the elimination, consolidation, or reduction of 190 programs at public universities, including 7 percent of all undergraduate programs. In addition to reductions in instructional programs, staff recommendations called for phasing out state support for intercollegiate athletics, redirecting 6 to 9 percent of the expenditures for research and public service to undergraduate education, and paying particular attention to faculty workload reassignments to undergraduate education.

The object of the recommendations was to free 6 to 8 percent of current resources, which would be retained by each university to reinvest in such state priorities as strengthening undergraduate teaching and learning, enhancing minority student achievement, keeping higher education affordable, improving faculty and staff salaries, and addressing deficiencies in library materials, instructional support, and facilities repair and maintenance.[11]

During the October meeting, public universities and the community college system presented reports outlining productivity improvements during the previous year. The IBHE plan for the following year called upon institutions (1) to implement fully the productivity improvements described in their 1992 reports, (2) to immediately engage campus communities in full consideration of IBHE staff recommendations for program reductions, (3) to implement the recommendations or comparable alternatives, and (4) to work cooperatively with board staff on priorities for 1992–93. These priorities included off-campus programs, state policies and reporting procedures, graduation rates and time-to-degree, transfer and articulation, academic calendars, faculty workload, and student financial aid.[12]

By September 1993, institutions had submitted productivity reports summarizing their responses to the 1992–93 plan. Forty-four percent of the identified 190 programs were eliminated or reduced, 26 percent remained under continuing review, and 30 percent were retained. Most institutions developed plans to phase out state support for intercollegiate athletics, but some replaced state funds with increased student fees. The IBHE progress report on the PQP initiative included narrative summaries analyzing the progress of institutions in identifying recommended next steps for the following year. During 1993, IBHE added the issues of affordability and faculty roles and responsibilities to institutional agendas.[13]

UNDERGRADUATE EDUCATION

In September 1986, IBHE adopted the recommendations of the Committee on the Study of Undergraduate Education. The committee called for commitment to three areas: student preparation and remediation, student achievement and scholarship and general education, and faculty teaching excellence. The committee report proposed community colleges to be the principal source of remedial education, reaffirmed the board policy of no credit toward degrees for remedial courses, and proposed the creation of an information system to foster cooperation among the public schools and higher education institutions.

To improve student achievement and general education, the committee also proposed increasing faculty/student interaction in scholarly and community service activities, enhancing student commitment to learning and undergraduate achievement, emphasizing the centrality of general education, and developing the means to assess student progress. The committee further urged IBHE to give priority to the attainment of these goals in the program approval and review process and in budget development.

Finally, the committee emphasized a series of recommendations that focused on the faculty: time devoted to undergraduate teaching should be recognized through salary promotion and tenure, the best and most experienced faculty should teach undergraduates, institutions should ensure that faculty are well prepared to teach and be proficient in English, institutional planning and resource allocation policies should emphasize undergraduate education and faculty development, and the program review process should focus on instructional improvement.[14]

The Committee on Undergraduate Education was reconvened in 1989. After meeting and deliberating, it presented to the board 32 recommendations that were adopted in 1990. The new policies reaffirmed much of the committee's earlier work. To the three areas previously identified for emphasis, the committee added transfer and articulation. Remediation was dropped, with the first area of focus redefined to include student preparation, access, and retention. Six statewide goals for undergraduate education were identified: (1) strengthening the academic preparation of high school students, (2) expanding access and improving students' chances for success, (3) promoting excellence in undergraduate teaching and increasing student/faculty interaction, (4) enhancing student involvement in and commitment to learning, (5) emphasizing the centrality of general education, and (6) establishing partnerships between two- and four-year institutions.

IBHE policies on undergraduate education call for annual status reports on the progress made by public universities and community colleges in implementing improvements. In these reports, institutions are expected to examine trends in undergraduate retention and graduation rates; class size, faculty and course evaluations; faculty/student interactions in and out of class; student use of and satisfaction with academic and support services; resource allocation to undergraduate instruction; employment rates, enrollment in further education, and success in certification or licensing examinations; and special analytical or longitudinal research studies. During 1992, the IBHE staff produced reports on progress in implementing its undergraduate education policies. The first report on teaching and learning reported five statewide trends.[15] The second report, *Undergraduate Education: Access and Preparation*, revealed much about the political process through which higher education policies are negotiated in Illinois.

State-Level Indicators

Many of the indicators used by Illinois in assessing productivity and quality followed logically from the board's design for improving the quality of undergraduate education. These are summarized in table 1. IBHE has designed or is designing four statewide information systems to collect the data used in producing indicators of system and institutional performance. Data provided by these systems are supplemented by institutional data collection and analysis such as the follow-up surveys individual community colleges undertake of the graduates of their career-oriented programs.

TABLE 1

IMPROVING THE QUALITY OF UNDERGRADUATE EDUCATION

	Preparation/Entry	Undergraduate/Exit
Establish Standards and Expectations	Admission Requirements: • Minimum high school course requirements • Entrance Exams (ACT, SAT) • Class rank and grade point average	Graduation Requirements: - General Education - Baccalaureate-level skills - Program major - Minimum credits and grade point average
Publicize Standards and Expectations	• Statement on "Preparing for College" sent to high school students via superintendents, principals, counselors, and board presidents • *Learning Outcomes for College-Bound Students* • College and university catalogs, admission brochures, and application forms • College and university admissions counselors working with high school counselors • College Nights/Fairs	• College and university catalogs • Academic program brochures • New student orientation programs • Academic advising
Assist in Meeting Standards	• School-College Partnerships to improve education • Early outreach programs for at-risk and advanced students • Summer bridge or transition programs • Teacher preparation and in-service training • High School Feedback System reports	• Academic advising • Entry-level skills assessment for course placement • General education and major courses • Honors programs • Assessment of whether baccalaureate-level skills and of objectives in general education and the major have been achieved • Provide guidance through: - Tutoring programs - Mentoring Programs - Supplemental sections in gateway courses - Workshops on study skills, note and test taking and time management - Career exploration and planning programs

Source: Illinois Board of Higher Education, *Undergraduate Education*, March 1992, Item 8.

Recent status reports produced by IBHE provide an overview of the evolution of indicators within the system:

1. **Annual Report on Underrepresented Groups Mandated by Public Act 84-726**
This report includes trends in representation and enrollments for minorities, females, and disabled students; trends in employment for minorities and females; trends in degree completion and retention for minorities, females, and disabled students; efforts to improve representation; and statewide strategies, programs, and funding.

2. **Status Report on the Implementation of Board Policies on Underserved Areas**
This report distinguishes authority to operate at off-campus locations from authority to offer off-campus degrees and provides an inventory of authorized off-campus activities. The board policies are, among other things, designed to improve access, strengthen quality, improve coordination, and provide programs in a cost-effective manner.

3. **Status Report on Implementation of Board Policies on Preparation of the Work Force**
This report integrates and expands existing board policies in such areas as basic skills preparation, information clearinghouses, annual reporting on underrepresented groups, alumni follow-up, and employer feedback.

Prior to the 1990 *Report of the Committee on Scope, Structure and Productivity in Illinois Higher Education,*[16] IBHE's practice was to report indicators related to its goals (diversity, access, academic excellence, economic development, and cost effectiveness) in an annual staff paper.[17] The concepts and proposals eventually made their way into an annual revision of the board's master plan.[18] Presumably, this planning and review process subsequently influenced institutional budget requests as well as the budget review and recommendation process by system boards and IBHE.

The indicators reported in the 1990 *Planning, Program, and Budget Issues* document provide a frame of reference for the following review of the current reporting structure. Indicators summarized by topical area included the following:

Maintaining Diversity — institutions, students, programmatic responsiveness, adequacy of support

Extending Educational Opportunities — affordability, opening opportunities for underrepresented groups, opening opportunities in underserved areas

Assuring Academic Excellence — academic preparation, undergraduate student achievement, faculty, and excellence in teaching, program review, and school-college partnerships

Promoting Economic Development — work force preparation and occupational trends, research, and public service

Improving Cost Effectiveness — expenditures by function, personnel expenditures, and facilities

Current Reporting Process

The process described above has been supplanted by IBHE's work on priorities, quality, and productivity. The current effort calls for the production of two reports: a productivity report from each institution and a board report summarizing institutional progress in implementing PQP principles.

The productivity reports present information from each institution to increase the outside visibility of the planning process. The first section provides information about institutional goals and their relationship to state goals, plans to improve quality and cost effectiveness, and descriptions of how resources will be allocated to further institutional goals and priorities. The second section provides a summary of the extent to which goals for the preceding year have been achieved. The reports are expected to include descriptions of improvements in quality and cost effectiveness, as well as descriptions of actual resource allocations and reallocations compared to those planned in the previous report.

The board report informs the public about the performance of higher education statewide in relation to state goals and policy objectives. Indicators provided in the first of these reports include capacity in relation to student demand; capacity in relation to occupational demand; centrality in relation to institutional mission; breadth of instructional unit (majors/specializations in relation to enrollment); quality of the instructional unit (as determined through the program review process, which examines such variables as clarity of program objectives, faculty qualifications and productivity, curriculum, academic support services, student achievement and success, student enrollment levels, unit costs, and occupational demand); success of graduates (employment trends, further education, satisfaction, and pass-rates on licensure exams); and program costs that deviate markedly from the norms. The 1993 report includes an assessment of progress in responding to the recommendations in the 1992 report, as well as a narrative section tracing the actions and work remaining for each institution.

CONCLUSION

The Illinois experience is important to states implementing state-level indicators. First, Illinois has consistently sought indicators of progress in achieving the goals and priorities advanced by its governor, legislature, and by IBHE. The legislature provided incentives for IBHE to examine remediation, student preparation, and the status of underrepresented students. More recently, the governor has expressed interest in productivity and accountability. On its own initiative the board has examined issues related to work force preparation, underserved areas, affordability, and faculty roles and responsibilities. Each initiative has contributed to the current reporting system and the indicators that are emphasized.

Second, Illinois' approach to establishing state indicators is inextricably linked to the planning, review, and budgeting processes. IBHE was established to plan, review, and approve programs and recommend budgets. To the extent that these powers can be used in mutually supportive ways to pursue a limited number of priorities about which there is some public consensus, the board's authority is enhanced. Increasingly, IBHE has sought synergy among its highest priorities by uniting them within its initiatives on undergraduate education and productivity.

Reporting is the key to using indicators effectively. Ideally, reports are designed specifically for an intended constituency, appear with regularity, and are used to mobilize the general public as well as state policymakers in improving institutional accountability. Technical reports prepared by a state agency for the internal use of board members are no substitute for the institutional productivity reports currently being produced in Illinois.

Coordinating boards, even strong and experienced ones, walk a difficult path in defining and applying performance indicators. When boards are perceived as overly zealous, they invite legislative intervention. When they are overly cautious, institutions remain intransigent and non-responsive. Any attempt to establish indicators for specific institutional responses can benefit from the cautious Illinois pattern of building consensus, planning for change, allocating resources primarily in the form of incentives, requiring reports, and implementing stronger central intervention only after unsatisfactory institutional responses have created impatience among policymakers and the general public.

NOTES

1. Illinois Board of Higher Education, *Planning, Program and Budget Issues for Illinois Higher Education* (October 1990), p. 3.
2. Illinois Board of Higher Education, *Master Plan for Illinois Higher Education 1991* (September 1991), p. iii.
3. *Master Plan, 1991*, pp. iii–iv.
4. Illinois Board of Higher Education, *Report to the Governor and General Assembly on Underrepresented Groups in Public Institutions of Higher Education in Illinois* (January 1992), pp. 7–8, Appendix I.
5. *Planning, Program and Budget Issues for Illinois Higher Education*, p. 21.
6. Illinois Board of Higher Education, *Status Report on Implementation of Board Policies on Preparation of the Work Force* (October 1992), pp. 35–38.
7. Illinois Board of Higher Education, *An Action Agenda for Illinois Higher Education: Improving Quality, Cost Effectiveness, and Accountability in the 1990s* (May 1990), pp. 1–4.
8. Illinois Board of Higher Education, *Priorities, Quality and Productivity of Illinois Higher Education* (November 1991), pp. 2–5.
9. Illinois Board of Higher Education, *Statewide Perspectives on Guidelines for Improving the Productivity of Instructional Units* (May 1992), pp. 23–25.
10. Illinois Board of Higher Education, *Guidelines for Productivity Improvements in Illinois Higher Education* (August 1992), pp. 1–10.
11. Illinois Board of Higher Education, *Staff Recommendations on Productivity Improvements at Public Universities* (October 1992).
12. Illinois Board of Higher Education, *Priorities, Quality, and Productivity of Illinois Higher Education: Recap of 1991–92 and Plan for 1992–93* (November 1992), pp. 3–8.
13. Illinois Board of Higher Education, *Priorities, Quality, and Productivity of Illinois Higher Education: Summary and Assessment for 1992–93 and Recommendations for 1993–94* (November, 1993), pp. 4, 12, 14–33.
14. Illinois Board of Higher Education, *Undergraduate Education* (September 1986).
15. Illinois Board of Higher Education, *Undergraduate Education: Learning and Teaching* (January 1992).
16. Illinois Board of Higher Education, *An Action Agenda for Illinois Higher Education: Improving Quality, Cost Effectiveness, and Accountability in the 1990s* (May 1990).
17. See, for example, *Planning Program and Budget Issues for Illinois Higher Education* (October 1990).
18. Illinois Board of Higher Education, *Master Plan for Illinois Higher Education* (September 1991).

KENTUCKY

Sandra S. Ruppert

OVERVIEW

Kentucky's 1990 assessment mandate, the Kentucky Accountability Enhancement Program (KAEP), was preceded by several years of higher education academic program review and realignment. While the stated purpose of KAEP, which coincided with elementary and secondary education reform legislation, was to "respond to the public interest in the outcomes of higher education," the law closely paralleled early efforts in other case-study states that allowed institutions to develop their own assessment and reporting plans.

In 1992, the general assembly passed legislation requiring public higher education institutions to report annually on 14 common performance standards. Patterned on legislation in such states as Florida and South Carolina, the measures were designed to monitor performance in the areas of instruction, research, and public service. In 1993, as part of an initiative to restructure state government, the governor appointed the Higher Education Review Commission (HERC) to conduct a thorough evaluation of Kentucky's higher education system. The HERC final report, presented to the governor in December 1993, contained a series of recommendations that included implementing performance-based evaluation and funding. If performance-based funding passes the general assembly during the 1994 legislative session, addition-to-base funding will be awarded according to performance criteria.

CHRONOLOGY AND CONTEXT

System Design and Evolution

The Kentucky Council on Higher Education (CHE), established in 1934, is considered to be the country's oldest state coordinating agency for higher education. Following substantial amendments over the years, council duties and responsibilities currently include comprehensive planning, institutional budget review, and consolidated recommendations for state funding of higher education. Further, CHE is authorized to define and approve the offering of all degree programs, determine tuition levels, and set minimum admission requirements at the public institutions. The council also has responsibility for the review and approval of all capital construction and renovation projects exceeding $400,000.

Statutes defining council membership were revised in 1980 to reflect the current composition, which includes 17 lay members appointed by the governor. The commissioner of the department of education also serves as an ex-officio member. Kentucky's statutes provide that among the lay members, there must be at least one undergraduate degree recipient from each of the state universities and one member from each of the seven supreme court districts, thus ensuring regional representation. Although the state has a Secretary for Education, Arts and Humanities, the council is an independent board, responsive to the legislature but reporting directly to the governor.

Under Kentucky's governance system, each of the eight public universities has an institutional governing board. The University of Kentucky's Board of Trustees governs the institution in addition to 14 public community colleges. Seven other boards each govern a single institution: University of Louisville, Eastern Kentucky University, Kentucky State University, Morehead State University, Murray State University, Northern Kentucky University, and Western Kentucky University. The Council of Independent Kentucky Colleges and Universities serves as the state-level organization for 20 of Kentucky's accredited nonpublic colleges and universities.

Selected Facts and Trends Related to Higher Education in Kentucky

A number of forces are affecting Kentucky higher education at this time:

- High school graduation rates and college-going rates have increased in the last decade. However, at the same time, the actual number of high school graduates has declined since 1978 and is expected to decline through 2000.

- Beginning in fall 1986, headcount enrollment at Kentucky's public and independent institutions has grown steadily, resulting in a 38 percent increase by 1992. The most significant increase (102 percent) was at the University of Kentucky community colleges. Public university enrollment increased by 26.1 percent and enrollment at independent institutions increased 13 percent between 1985 and 1992.

- State supported universities saw a 4 percent decrease in first-time freshmen enrollment between 1982 and 1991, while total enrollment increased by 108 percent at community colleges. During the same time period, African-American enrollment increased by 26 percent at state supported two- and four-year institutions.

CHRONOLOGY OF RELATED PRIORITIES AND INITIATIVES

1981: CHE's blue-ribbon citizen group, the Prichard Committee, releases a seminal study, *In Pursuit of Excellence*. The committee issues 100 recommendations, the vast majority of which are under CHE's jurisdiction. In the following five years, complete review of all degree programs is conducted, resulting in a decrease of about 200 programs; a precollege curriculum is established; the tuition policy is revised and geared to the ability of students to pay; a formula-funding system is developed; and implementation is begun on a systemwide plan for desegregation of higher education.

1985: The council adopts its first five-year plan, the *Strategic Plan for Higher Education in Kentucky*, which contains 8 goals and 50 objectives.

1989: The council revises academic program review guidelines to strengthen connections with the strategic plan. The new guidelines emphasize qualitative assessment and program improvement in all decisions relating to academic program improvement.

1990: *The Kentucky Education Reform Act* (KERA) is passed, which commits the state to comprehensive and fundamental changes in its system of elementary and secondary education. A concurrent resolution of the general assembly gives higher education roles and duties in this process.

1990: Based on recommendations from the governor and CHE, the general assembly creates and funds the *Kentucky Accountability Enhancement Program* (KAEP), designed to achieve systemwide improvement in higher education.

May 1991: The second *Strategic Plan for Higher Education in Kentucky 1991–1996: Vision Focus Action* is adopted. Themes include planning, cooperation, articulation, teaching, education reform, technology, funding, and accountability.

February 1992: The general assembly passes Senate Bill 109 (SB109), outlining 14 performance standards for public higher education institutions and requiring annual reporting of progress on these standards.

September 1992: CHE produces the *Kentucky Plan for Implementing the Higher Education Accountability Process*, otherwise known as the Accountability Process Plan, for reporting on each of the 14 performance standards outlined in SB 109.

September 1993: Governor Brereton Jones appoints a higher education review commission to conduct a thorough evaluation of higher education and report its findings by December 1993.

November 1993: The council authorizes a comprehensive review and revision of the higher education funding formula during 1994–95 and recommends implementation of performance-based funding in the 1996–97 biennial budget cycle.

December 1993: The governor's Higher Education Review Commission (HERC) adopts its final report and recommends performance funding for 1995–96. The governor includes this approach in his executive budget recommendation in January 1994.

ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

Over the past decade, Kentucky's approach to assessing institutional effectiveness has been linked to systemwide and institutional planning. The state's history of strategic planning began with the 1981 report of the Prichard Committee on Higher Education in Kentucky's Future. Their report, *In Pursuit of Excellence*, resulted in Kentucky's first five-year strategic plan, adopted in 1985. The council completed a second cycle of strategic planning and published its report in 1991. While access was the primary focus in the earlier plan, quality issues, particularly related to undergraduate education, surfaced as the focus of the second.

Extensive academic program reviews were undertaken during the 1980s. Strategic plans increased expectations for such reviews, emphasizing instructional improvement and greater reliance on qualitative assessment of program outcomes. New guidelines published by the council in 1990 also strengthened the program-review process by merging program review and planning functions. In this merged process, institutional program review was geared to providing greater support to institutional planning and priorities.

Legislative actions in 1990 were to have a significant impact on Kentucky's education system. That year, the Kentucky legislature passed the *Kentucky Education Reform Act* (KERA), which committed the state to making comprehensive and fundamental changes in its elementary and secondary education system. It was later to shape higher education developments as well.

For higher education, lawmakers created and funded the *Kentucky Accountability Enhancement Program* (KAEP). The stated purpose of KAEP was to "respond to the public interest in the outcomes of higher education," placing the focus squarely on accountability. However, the law closely paralleled earlier institutional assessment efforts in other states by specifying that institutions should develop their own assessment and reporting plans. The program sought to establish "a coordinated system-wide effort to demonstrate and improve the effectiveness of higher education in meeting Kentucky's needs."

Under KAEP, each public institution was to conduct an ongoing strategic planning process specific to its mission and responsive to systemwide goals. Institutional accountability would be achieved through attention to the mission and goals outlined in strategic plans. System-level accountability was directly tied to the goals generated through the council's systemwide planning.

KAEP was seen as a way to coordinate a number of existing efforts aimed at improving higher education. Through this process, "institutional progress and target areas in need of improvement" could be documented. As part of a larger strategic planning process, KAEP was intended to provide new types of information to help determine the areas in which higher education was improving and the areas where change was needed.

Process Required

The council adopted a collaborative approach in designing the process for implementing KAEP. The Kentucky Accountability Network was formed to solicit institutional input during the development of KAEP guidelines as well as to provide an avenue for ongoing communication between the council and Kentucky's colleges and universities. The network also shared information related to the development and implementation of campus-based assessment programs. An advisory board for the network, comprised of council staff and institutional representatives, was charged with planning the direction of assessment and accountability in Kentucky.

In addition to the Kentucky Accountability Network, during 1990–91 an office was established within CHE, charged to offer technical assistance for institutional assessment activities and to facilitate statewide conferences. Further assistance was supported by funding in the council's budget for 1990–92, earmarked for the development of model approaches to assessment. During that time, the council awarded two rounds of mini-grants for institutions to conduct pilot studies and implement student assessment practices.

Assessment Domains

The approach taken to implementing KAEP was campus-based and respected distinct institutional missions. Each institution developed an assessment program to monitor efforts to meet goals and objectives identified through its own strategic-planning process. At the same time, each institution defined program quality for the purpose of academic program review activities, developed criteria consisting of resources and student/program outcome measures by which program quality would be assessed, and reported the findings and recommendations to the council.

The council and institutions shared the responsibility for monitoring performance levels and determining the adequacy of existing academic programs, in the process identifying and resolving areas of concern. The program review guidelines specified only that institutions should monitor productivity levels, avoid unnecessary duplication, and address discipline-specific concerns. The latter included manpower shortages and surpluses, graduate survey findings, rate-of-pass on licensure examinations, job placement rates, rate of enrollment growth, and staffing and equipment availability.

STATE-LEVEL INDICATORS

In Governor Jones' January 1992 State of the Commonwealth Address, he spoke of the need to "adopt the same principles in higher education that made our primary and secondary education reform efforts the model for the nation." He suggested that higher education needed to have goals in instruction, research, and public service, as well as a system for assessing each institution's progress.

That year, the Kentucky legislature passed Senate Bill (SB109), which established specific reporting requirements for the state's public colleges and universities. The measures were designed to monitor performance in the areas of instruction, research, and public service while still recognizing individual institutional missions. To implement this bill, the legislature appropriated funds directly to colleges and universities.

The specific language of SB 109 included the following directives:

> . . . an accountability process [is to] be implemented which provides for a systematic, ongoing evaluation of quality and effectiveness in Kentucky public institutions of higher education and to provide a method for evaluating each institution's progress toward meeting specific standards.

> It is further the intent of the General Assembly that the accountability process monitor performance at the institutions in each of the major areas of instruction, research and public service while recognizing the individual missions of each of the institutions. The accountability process shall provide for the adoption of systemwide and individual performance goals with standards identified through a collaborative effort involving higher education institutions and the Council on Higher Education.

In September 1993, Governor Jones appointed the Higher Education Review Commission (HERC) to conduct a thorough evaluation of Kentucky's higher education system as part of an initiative to restructure state government. The commission, headed by the CHE chair and composed of public university presidents, board chairs, key legislators, governor's staff, and the council's executive director, was charged to submit to the governor a plan for restructuring public higher education that focused on "specialization, quality, performance, cooperation and controlling expenditures." Governor Jones described the work of the commission as a "fact-facing, not a fact-finding" effort.

In a speech to HERC, the governor offered higher education institutions the opportunity to be spared budget cuts beyond the more than $80 million they had experienced since October 1991. In return for avoiding further cuts, higher education was to address quality and efficiency issues through cooperation and within available resources.

The governor outlined 14 topics for the commission's attention. These included mission-statement refinement; program duplication elimination; student performance measurement; campus management evaluation; refinement of efficiency goals, including the review of administrative and faculty workloads; and improving coordination statewide. Particularly relevant was the recommendation that HERC closely examine how quality and efficiency in higher education could be promoted through performance-based evaluation and funding.

HERC presented its final report to Governor Jones on December 20, 1993, two weeks prior to the opening of the 1994 legislative session. In attempting to respond to the governor's challenge "to remake higher education in Kentucky," the HERC report contained 14 recommendations relating to specific areas of gubernatorial interest. Three recommendations addressed developing and implementing a revised funding model based on performance measures, many of which were already reported under SB 109.

Process Required

SB 109 established the prioritized measures for institutional accountability. The bill explicitly identified data to be collected and set out the process and timeline for gathering them. The Kentucky

Accountability Committee was then responsible for developing the plan and the process for implemention. The result was the *Kentucky Plan for Implementing the Higher Education Accountability Process*, which recognized parallel processes for institutional and system-level accountability.

Collectively, the two processes represented systemwide accountability. The KAEP process was similar but more explicit about goal setting and reporting relative to SB 109 criteria. Four phases of the process were identified:

Strategic planning — Systemwide strategic planning was completed with publication of the current strategic plan. Institutions were expected to conduct strategic planning and set priorities according to their missions and the council's plan.

Baseline reporting — During this phase, systemwide and institution-specific information were to be collected and analyzed according to the 14 indicators in SB 109.

Goal setting — After the establishment of baseline reporting, performance goals were to be developed for both the system and institutions relative to SB 109 criteria.

Annual reporting — Beginning December 1, 1993, CHE was to submit to the governor and the legislature an annual accountability report that included information on implementation of the mandated standards, achievement of goals, and initiatives to be undertaken.

In the December 1993 proposal, HERC agreed to a revised funding model based on the following principles: the need for funding beyond the core level to be outcomes-driven (i.e. performance-based), the use of incentives to achieve desirable management goals, and the increased use of institutional mission differentiation rather than extensive use of "common funding for common activities." In terms of the set of measures to be used, HERC recommended that they address the following areas: persistence of students, student outcomes, quality of instructional programs, quality of research/service programs, and campus management. It was also agreed that measures in each of the areas should be based, when possible, on the data collected through SB 109 and the *Higher Education Equal Educational Opportunities (EEO) Plan*. HERC further reconfirmed that the measures should reflect mission differentiation among Kentucky's colleges and universities. Other goals and measures as needed would be developed cooperatively by the council and the institutions in future biennia. Moreover, HERC agreed to an increased connection between funding and quantifiable measures of success:

> . . . points should be awarded proportionately for progress toward established goals in other than "evidence of" or nonquantifiable measures. It was also recognized that reliance on "evidence of"

measures, while necessary where baseline data are not available in the initial round of performance funding, would be reduced in future years.

Assessment Domains

Each institution was expected to respond to SB 109 by collecting indicators according to its mission statement, goals, and overall environment. These included the following:

1. Total student credit hours produced, by institution and discipline
2. Total number of degrees awarded, by institution and discipline
3. Total number of contact hours of instruction produced by faculty, rank of faculty, institution, and course level
4. A measure of faculty workload to include the hours spent in the following activities: instruction, course preparation, noninstructional student contact, research, and public service
5. Pass-rates on professional licensure examinations, by institution
6. Institutional quality as assessed by follow-up surveys of alumni, parents, clients, and employers
7. Length of time and number of academic credits required to complete an academic degree, by institution and degree
8. Enrollment, persistence, retention, and graduation rates by discipline and by race, gender, and disability
9. Student course demand analysis
10. Classroom utilization
11. Research and public service activities, including activities supporting elementary and secondary education reform
12. The number and percentage of accredited programs and the number and percentage of programs eligible for accreditation
13. The percent and number of students enrolled in remedial courses and the number of students who exit remedial courses and then successfully complete entry-level curriculum courses
14. The number of full-time transfer-students from a two-year, postsecondary institution and the number of these students who have successfully completed a four-year program

HERC provided a list of performance-funding measures to be used by each institution along with the required minimum and maximum distribution of points in the five major areas for the 1995–96 performance-based funds:

Persistence of students (subtotal 10–30 points)

1. Persistence of first-time, full-time degree-seeking freshmen (SB 109)

2. Persistence of African-American first-time, full-time freshmen (SB 109)
3. Number of degree-seeking transfer students sent by community colleges to universities or received by universities from community colleges (SB 109)
4. First-to-second year retention rate of first-time, full-time degree-seeking freshmen (SB 109)
5. First-to-second year retention rate of African-American students (SB 109)

Student outcomes (subtotal 10–30 points)

1. Graduation rates (SB 109)
2. Graduation rates of African-American students (SB 109)
3. Success rates of students who complete remedial math and English courses, and successfully complete entry-level courses (SB 109)
4. Satisfaction of graduating students (SB 109)
5. Satisfaction of alumni (SB 109)
6. Satisfaction of employers (SB 109)
7. Periodic, comprehensive student assessment

Quality of instructional programs (subtotal 10–30 points)

1. Evidence of elimination of programs targeted by HERC and evidence of periodic review of programs
2. Percentage of faculty hours allocated to instruction (including course preparation and noninstructional student contact) (SB 109)
3. Quality of incoming class by ACT score
4. Success rates on licensure exams (SB 109)

Quality of research/service programs (subtotal 10–30 points)

1. External research support per full-time faculty (SB 109)
2. Evidence of Kentucky Education Reform Act (KERA) activities (SB 109)
3. Evidence of faculty involvement in service mission activities other than KERA — including economic development (SB 109)
4. National ranking among U.S. research universities (NSF)

Campus management (subtotal 10–30 points)

1. Percentage of African-American employees in selected EEO categories (EEO plan)
2. Percent of funds expended for institutional support (IPEDS)
3. Adoption of strategic plans and evidence of program priority-setting
4. Evidence of periodic update of a campus's facilities maintenance plan as envisioned by the Capital Planning Advisory Board

5. Evidence of periodic review of organizational structure
6. Evidence of the existence of a comprehensive staff-development plan
7. Classroom and class lab utilization rates for degree credit activity (SB 109)

REVIEW AND REPORTING OF RESULTS

Comparative Use Data

The guidelines in the accountability process plan for SB 109 required annual reports including a "concise, straight-forward systemwide summary report and brief, to-the-point, institution-specific reports." In the individual reports, institutions are to indicate individual progress toward their respective goals rather than to be compared with one another. Aggregate data are to be used to account for overall outcomes in the system-level report.

The language of SB 109 recognizes distinct institutional mission differences but still requires that all institutions report on a common set of indicators. Thus the Kentucky Accountability Committee has adopted a reporting strategy that includes 22 institutionally specific reports (the 8 university and 14 community colleges reports) and an overall systemwide summary. Under performance measures recommended by HERC and being considered by the general assembly for 1995–96, institutions will be eligible for performance funds if they report on a core set of outcomes. Preapproved standards will weight the performance of individual institutions in defined areas.

Use of Quantitative and Qualitative Data

Each SB 109 performance standard is classified as quantitative or qualitative. Quantitative indicators are total credit hours, total degrees, enrollments, persistence and graduation rates, transfer rates, instructional contact hours, faculty workload, time and credits-to-degree, course demand, and classroom utilization. Qualitative indicators include results from surveys of alumni, parents, clients, and employers; success following remedial courses; licensure-exam pass-rates of graduates; research and public service; and program accreditation. Performance-funding measures are primarily quantitative and overlap significantly with data collected through SB 109.

Use of Contextual Data

As discussed above, strategic plans and institutional mission statements have been seen as providing the frameworks within which institutions can address system and institutional goals and then report their results. Institutional and system-level strategic plans are to be the vehicles for periodic reporting in order "to demonstrate more clearly to the general public and state policymakers that higher education is committed to reporting outcomes and able to account for the wise use of state resources." Results from program review, accreditation, and other campus-based evaluative processes are to be used as part of the evidence of institutional effectiveness. Initial emphasis has been placed on using existing information to determine how well the goals of strategic planning have been accomplished. In addition, the council is to prepare semi-annual system-level status reports that described improvement toward meeting systemwide goals.

CONNECTION TO OTHER PROCESSES

Linkages to Budget

Although Kentucky higher education has lost ground in recent years in terms of the percentage of the total general fund it receives, special funding has been allocated specifically for accountability purposes. Under KAEP, the legislature provided additional funding to the council. In 1992, with passage of SB 109, the legislature for the first time appropriated some of the accountability funds directly to the universities. The 1992–94 budget also appropriated monies to the council for maintaining the accountability office, coordinating SB 109, and upgrading the council's computer system.

As of this writing, the higher education general appropriations act, which included provisions for performance-based funding, had been approved by the General Assembly's House Appropriations and Revenue Committee and was headed to the entire general assembly for a vote. As detailed in the appropriations act, performance funds not distributed are to be returned to the general fund; additional or alternative performance measures will be considered in the revised funding model to be implemented in 1996–98.

Linkages to Planning

Kentucky's state policymakers have made conscious and deliberate efforts to link closely educational effectiveness and planning functions at both the state and institutional levels. This connection is basic to the state's concept of systemwide accountability. While the 1985 strategic plan emphasized access and attainment, the 1991 plan focused on quality as it pertained to both the "lives of Kentuckians and the public institutions of higher education." The focus of the 1991 strategic plan was on six goal clusters: quality, effectiveness, equal opportunities, attainment, elementary and secondary education, and economic development. The themes underlying these initiatives stressed planning, cooperation, articulation, teaching, education reform support, technology, adequate funding, and accountability.

CONCLUSION

Kentucky has moved forward rapidly on assessment and accountability and appears well on its way to join Tennessee in linking funding to performance. It remains to be seen how successful new accountability efforts will be in promoting state and institutional planning and improvement.

THE STATE UNIVERSITY OF NEW YORK

Richard C. Richardson, Jr.

OVERVIEW

The State University of New York (SUNY) has taken the initiative in developing system-level performance indicators. Public reporting on how well the system is meeting established goals is viewed as a requirement for increased budgetary and management flexibility for the system. A strong link exists, therefore, between planning and a public reporting system. In the system's master plan, the proposed indicators fall under five major planning areas: access, undergraduate education, graduate education and research, state needs, and management. This list includes only general indicators of system and institutional performance. SUNY staff anticipate that campuses will themselves develop more specific indicators to reflect individual institutional missions. At the time of this report, the system had yet to go through the first round of institutional reporting on a core set of performance indicators.

SUNY has taken a proactive approach to developing accountability measures. Given the beginning stages of the process, it is unclear as yet how the results will be used to promote institutional and system improvement or how they will link to budget incentives.

CHRONOLOGY AND CONTEXT

System Design

The nation's largest comprehensive university system, the State University System of New York (SUNY) is composed of 4 university centers (2 with health science centers), 13 universities, 2 stand-alone health science centers, 3 specialized colleges, 6 two-year colleges of technology, and an upper-division institute of technology. SUNY also encompasses 30 community colleges and 5 statutory colleges, 4 at Cornell University and 1 at Alfred University.

A board of regents oversees all public higher education in New York as well as the state education department. The board of trustees of the SUNY system, in turn, governs all public higher education institutions in the state except for those within the City University of New York (CUNY) system. SUNY's trustees directly administer the state-operated campuses but with substantial authority delegated to campus advisory bodies. The trustees practice what is termed "general supervision" of the statutory colleges at Cornell and Alfred and have shared responsibility for the community colleges.

Student Demographics

Almost 40 percent of state students enroll at a SUNY campus. In fall 1990, the total SUNY enrollment of 403,028 included 192,651 enrolled in community colleges and 210,377 (167,461 full-time-equivalent [FTE]) in the four-year sector. (For purposes of comparison, CUNY enrolled a total of 200,700 students for the same period.) The student body is diverse in age, economic and social background, and academic preparation. In 1990, more than half of the students were women and 13 percent minority.

SYSTEM EVOLUTION: INITIATIVES AND PRIORITIES

When SUNY was created in 1948, it was in the face of substantial opposition from the private higher education sector and, to some degree, from the New York Board of Regents.[1] It was to be the last American state university. During the 1950s and 1960s it grew to its present configuration by collecting together existing state teachers' colleges, two-year institutes of agriculture and technical studies, new locally sponsored and operated community colleges, and three once-private institutions. Some aspects of SUNY's development were retarded by the persistent belief in the state of New York that the purpose of public institutions should be more limited than that of their private counterparts.[2] SUNY's history can be summarized around two themes: (1) planning, and (2) working for the autonomy necessary to achieve system goals.

Planning

Since 1956, the board of trustees has submitted a master plan to the regents and governor every four years. In accordance with the master planning statute adopted in 1961 and revised in 1971, the trustees also provide biennial revisions and progress reports as well as individual amendments to the master plan. Early plans concentrated on new campuses and expanded missions. In the 1970s, the emphasis shifted to completing campuses and improving governance arrangements and campus life. A concern with program quality and serving a more diverse student population characterized the 1980s, along with renewed attention to SUNY's role in graduate programs and research.

Striving for Institutional Autonomy

Despite earlier efforts to increase system autonomy, the Independent Commission on the Future of the State University concluded in 1985 that SUNY was the most overregulated university in the country. The governor and legislature responded to commission recommendations by granting the university broad authority over budget execution and reallocation of resources, significantly stronger personnel authority, and more control over purchasing and contracts.

In 1993, SUNY developed policies to enhance system flexibility by allowing universities to retain their tuition incomes and to carry funds forward from one year to the next. Because central administrators believe that increased autonomy and accountability are interrelated, they coupled flexibility with the development of system-effectiveness indicators. While SUNY is not currently under direct gubernatorial or legislative pressure to develop indicators, central administrators believe that doing so will allow the system to be proactive rather than reactive.[3]

Current System Priorities

The current master plan, *SUNY 2000: A Vision for the New Century*, outlines five overarching, system goals to which each campus is expected to respond in developing its own vision of blending access and excellence. The goals most central to this case study, access and undergraduate education, are summarized in detail below. The remaining three goals in the areas of graduate education and research, state needs, and management are summarized in condensed form.

Access goals involve keeping SUNY open to all, regardless of financial circumstances, race, ethnicity, religion, age, gender, or special needs. Achieving system goals requires attention to the following areas:

- Retention, completion of degree work, and subsequent success

- Preserving system diversity

- Transfer of students from two- to four-year colleges

- Affordable tuition and fees

- Outreach to middle and secondary schools and to students who leave without completing them

- Expanded attention to distance learning, self-paced instruction, and credit for prior life experience

- Special efforts to recruit, enroll, retain, and graduate students from underrepresented populations

- Special efforts to attract the best and brightest and to challenge the most well-prepared

- Additional resources to offset the cuts of the 1980s and to increase quality

Undergraduate education goals emphasize diversity, quality of curricula, and strengthened commitment to teaching and learning. Responding to these system goals requires the following:

- Standards that require student mastery of oral and written communications, quantitative analysis, critical reasoning, and computer literacy

- Curricula that encourage awareness of global interdependencies through study of foreign languages and cultures, participation in student exchanges, and collaboration

- Curricula that develop responsible attitudes and behavior in a society that values individual liberty, while concurrently working to assure greater equality of opportunity for diverse cultures

- Programs that attract and graduate students in mathematics, the sciences, engineering, and the technologies needed to meet the needs of New York state business and industry

- Faculty development programs and graduate education that enhance teaching effectiveness and faculty evaluation, and incentive systems that reward effective teaching and the application of new technologies

- Dedication to the education of the whole person

- Comprehensive curricula and programs

- Assessment of undergraduate student learning outcomes

Graduate education and research goals stress SUNY's continuing development into one of the finest public research universities in the country. State-need goals underscore SUNY's commitment to meeting work force needs, strengthening collaborative work in public education, health care, social welfare, environmental conservation, and promoting culture and the arts. Management goals focus on the efficient and effective use of public resources.

Excellent undergraduate education appears to have been an assumption rather than an objective within the SUNY system. The system practice of taking excellence in undergraduate education for granted, however, has not gone unchallenged. Governor Cuomo's 1986 response to a board of regents' planning document notes the failure to identify problems or to provide (except in the most general sense) a means for evaluating effectiveness. The governor's comments have not gone unnoticed. A recent policy paper by SUNY staff argues for system and campus performance reports as a way of balancing greater system and campus autonomy with public accountability.

System-Level Indicators

The concept of performance indicators, as described in *Meeting the Productivity Challenge: System and Campus Reports*, owes its genesis primarily to the Independent Commission on the Future of the State University. While SUNY already had an extensive statistical database, the commission recommended the collection and publication of data in a single comprehensive report to aid in the review of system performance as it relates to state needs. As part of the reporting process, the SUNY Board of Trustees is to review assessment results, and its chancellor is to publish an annual summary report for campuses, state officials, and the general public. The annual assessment will, for the most part, include only data already available in a variety of existing SUNY reports. What will be new is the inclusion of relevant data in a single comprehensive report,[4] although, it had not yet been produced at the time this report was written.

SUNY has developed criteria for the indicators to be used for periodic public reporting of performance.[5] These indicators must meet particular criteria: (1) they are not to diminish or distort the diverse missions of constituent campuses, (2) they must examine performance from a system rather than campus perspective, (3) they are to provide tangible evidence of the degree to which the goals outlined in SUNY 2000 are being achieved in relation to available funding, and (4) they should stimulate improved performance in addition to describing current results.

While there is broad consensus on the goals to be addressed, there is less agreement about the choice of the indicators themselves. The proposed list includes only general indicators that reflect a system and institutional perspective, leaving it to the campuses to develop more specific indicators appropriate to their goals. Using existing data to avoid the development of costly new information systems necessarily places constraints on what can be used. That decision was made, however, to permit current results to be compared with past performance and to make individual campus data comparable with those of other SUNY units with similar missions. In addition, comparison was sought with the data of peer institutions, the system as a whole, and a composite of those of peers.

Proposed indicators are divided into five main sections corresponding to the five general goals previously described in SUNY 2000. In addition to these measures, there are also indicators of the level of fiscal support. Proposed indicators include access, undergraduate education, graduate education and research, state needs, and management.

Access

- Enrollments by race/ethnicity
- Transfer rates of students from two- to four-year institution
- Trends in cost of attendance
- Degree and certificate completion rates and time-to-degree statistics

Undergraduate Education

- Percent of campuses with approved plans for assessing student performance
- Evaluation of basic skills, general and specialized education, and personal and social development
- Pass-rates on certification examinations
- Student perceptions of the quality of their undergraduate education as revealed in American College Testing surveys
- Results from a survey by the Higher Education Research Institute reporting faculty perceptions of the quality of undergraduate and graduate education as well as performance on research and service activities
- Proportion of resources devoted to undergraduate instruction
- Class size by level and program
- Alumni satisfaction survey

Graduate Education and Research

- Enrollment by graduate program and level
- Graduation rates and time-to-degree for all graduate students and by race and gender

- Trends in the dollar volume of sponsored research for all campuses and for full-time faculty at SUNY doctoral centers
- Faculty survey from the Higher Education Research Institute
- Number of national faculty and student awards
- National ratings of doctoral programs

State Needs

- Number of graduates by field
- Amount of sponsored research related to economic development, environmental studies, health care, public education, and social services

Management

- Trends in student credit hours per faculty
- Student/faculty, student/staff and student/administrator ratios
- Ratings of the conditions of campus facilities
- Ethnicity and gender of faculty administrators
- Evaluation of external fundraising
- Faculty and student surveys of management and administrative services effectiveness

CONCLUSION

The development of indicators for the SUNY system appears to be a logical step in a planning process that has been successful in building a comprehensive system and securing sufficient autonomy for effective operation. In fact, continuing expansion and preservation of system autonomy is contingent on the use of indicators. Autonomy must now be balanced by evidence of accountability for using state resources in pursuit of state goals.

Underlying this logical evolution are the political overtones. For one, a long-term administration had occasional differences with the direction of public higher education and pointed out the absence of data on performance in relation to planning objectives. At least two other influences played a role, however. They are apparent in the board of trustees' proposal to initiate an indicator-based reporting system similar to those in use in other states. The first is the impetus furnished by a commission external to the university. The second is the careful effort to reassure campus interests that the proposed reporting system does not threaten their autonomy. The SUNY effort to develop indicators appears to be carefully coordinated: the SUNY faculty senate, for example, has charged the senate's Undergraduate Academic Program and Policies Committee with responsibility for providing advice on undergraduate academic assessment.[6]

In the SUNY case, therefore, there is clear evidence of intent to link performance indicators to the planning process. Increased system accountability is viewed as the responsibility that accompanies increased system budgetary and management flexibility. However, there appears to be no design to link performance results to funding other than through some general notion of accountability for previous allocations. Current plans call for campus results on general indicators to be sent to campus officials prior to the release of the system report. After the system report is published, campuses will issue their results both on the larger and the more specific campus indicators, along with explanatory comments. System and campus reports will be bound into a single volume for each year in order to track progress over time.

NOTES

1. State University of New York, *A Historical Perspective: 1975 Through 1990* (November 1991).
2. State University of New York, *SUNY 2000: A Vision for the New Century* (September, 1991), pp. 18–19.
3. Telephone interview with Joseph Burke, provost SUNY System (January 11, 1993).
4. State University of New York, *Meeting the Productivity Challenge: System and Campus Performance Reports* (December 23, 1992), pp. 5–6.
5. State University of New York, *Performance Indicators: Campus Autonomy and System Accountability* (September 30, 1992).
6. State University of New York, University Faculty Senate Resolution Modifying the Charge of the Undergraduate Academic Program and Policies Committee (January 31, 1992).

SOUTH CAROLINA

Sandra S. Ruppert

OVERVIEW

As with most other case-study states, South Carolina's initial assessment efforts in the 1980s were institution-based, with the primary goal of improving student learning. Accountability was also a stated goal, but institutions were urged to develop their own reporting formats and compare their own data over time. Annual institutional-effectiveness reports, prepared by the coordinating board, summarized individual institutional accomplishments in meeting goals. Institutional comparisons were not a part of the plan.

In 1992, the South Carolina legislature passed what is known as the Report Card legislation, requiring the coordinating board to report publicly specific data concerning higher education. This new law requires annual reports "to easily compare peer institutions in South Carolina and other SREB states with the state's postsecondary institutions." Much of the same information was previously collected for institutional-effectiveness reports, but the manner in which it is reported has changed. Information is to be arrayed in tables and matrices to enable interinstitutional comparisons. Further, the law requires the eventual reporting of results of a statewide alumni satisfaction survey.

CHRONOLOGY AND CONTEXT

System Design and Evolution

The South Carolina Commission of Higher Education (CHE) was established in 1967 as the higher education coordinating agency for the state's 12 public four-year and 21 public two-year colleges. In addition to 33 public campuses, the state has 28 private colleges: 23 four-year institutions and 5 two-year colleges. CHE has statutory responsibility for reviewing individual institutional budgets and making recommendations for a consolidated budget for both the two- and four-year colleges and universities. Also, CHE conducts studies and makes policy recommendations to the governor and general assembly, conducts program reviews, and has approval authority for new and existing programs.

Commission membership was restructured in 1978 and again in 1988 and is currently composed of 18 individuals appointed by the governor to four-year terms. The executive officer is appointed by and serves at the pleasure of the commission. Nine boards each govern single institutions; the Board of Trustees of the University of South Carolina governs the research university, 2 senior, and 5 two-year branches; and the State Board for Technical and Comprehensive Education governs 16 two-year comprehensive technical colleges.

Student Demographics

- Over two-thirds of adults in South Carolina have at least a high school diploma; 17 percent have a baccalaureate degree or more.

- In 1985, South Carolina's college-participation rate lagged behind both the southern region and the nation. Without a shift in this trend, the number of high school graduates entering college will decline by approximately 11 percent in the 1990s.

- From 1980 to 1990, total enrollment in higher education increased by 20 percent. In 1990, total postsecondary enrollment was 159,302 students, two-thirds of whom attended college full time. Twenty-two percent of students enrolled were minorities.

- Although higher education enrollments have been increasing, state funds for higher education operating expenses have declined 1 percent over the last two years.

Chronology of Related Priorities and Initiatives

1979: *The South Carolina Master Plan for Higher Education* is released. Among its nine goals is the mission to improve the quality of postsecondary education.

1984: The legislature passes the *Education Improvement Act*, legislation to reform K-12 education. Among other things, this legislation raises standards for high school graduation and is believed to have prompted the focus on higher education in the state.

1985–86: Financed by the general assembly, CHE commissions a study to evaluate higher education policy issues in South Carolina.

1986: A commissioned study by Augenblick, Van de Water and Associates (AVA) is issued. Among its recommendations are the call to make assessment of higher education quality a major objective in coming years and for CHE to increase its visibility among policymakers and citizens in state.

May 1987: A new commissioner for higher education, Fred R. Sheheen, is appointed. A so-called Cutting Edge proposal, developed subsequent to the AVA study, is updated, revised, and submitted to the general assembly.

June 1988: Legislative Act 629, known as the Cutting Edge legislation, passes. The act includes a provision for "improving accountability through planning and assessment."

1988: With initial financial support provided by the Fund for the Improvement of Post-Secondary Education (FIPSE), CHE, and Winthrop University (then College), the institution-based South Carolina Higher Education Assessment (SCHEA) Network is formed to help colleges and universities address assessment issues. (Currently, the SCHEA Network comprises 40 institutions and representatives from the CHE and the State Board for Technical and Comprehensive Education.)

February 1989: CHE approves *Guidelines for Institutional Effectiveness*, which provide colleges and universities with a list of 18 components of their academic and administrative operations that require assessment per Act 629. The institution-based process focuses on "improvement rather than on data collection." Annual reporting is required, with a schedule that phases in implementation over four years.

1990: The first *Summary Report on Institutional Effectiveness* is published, reporting on 3 of the 18 components for academic year 1988–89. The report purposely is designed "to discourage interinstitutional comparisons." Its purpose is described as a means "to strengthen the quality of individual colleges and universities through a continuous cycle of improvement."

1991: The first statewide strategic plan, *Choosing South Carolina's Future: A Plan for Higher Education in the 1990s*, is published. This plan is developed pursuant to Act 629. Recognizing that "the state could not move forward in all directions at once," CHE and the state's colleges and universities choose to focus on three issues: enrollment, quality, and collaboration.

1991: The second annual *Summary Report on Institutional Effectiveness* is issued in response to the requirements of Act 629. This report describes five effectiveness components from academic year 1989–90.

1992: The third annual *Summary Report on Institutional Effectiveness* describes nine of the components.

February 1992: The general assembly passes Act 255, a statute that requires CHE to report specific data concerning higher education to the governor and the general assembly prior to January15th of each year, commencing in 1993.

January 1993: Combined reports on Act 255 of 1992 and the *Summary Report on Institutional Effectiveness* are submitted and the 18 effectiveness components implemented.

ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

In South Carolina, as in many other states, the impetus for improving postsecondary education grew out of the elementary and secondary education reform effort. In 1984, South Carolina passed the *Education Improvement Act*, a critical piece of legislation that, among other things, raised standards for high school graduation. This act is believed to have prompted the focus on higher education in the state.

In 1985, the South Carolina legislature commissioned a study to evaluate higher education policy issues. The resulting report, *Higher Education in South Carolina: An Agenda for the Future* by Augenblick, Van de Water and Associates (AVA) was published in February 1986 and contains 9 recommendations to improve quality and 13 recommendations to strengthen the commission. The AVA report echoed many of the national and regional studies of the mid-1980s that called for renewed emphasis on quality and accountability in higher education.

Following the AVA report, six advisory task forces comprised of institutional representatives, system representatives, legislators, a lay citizen, and CHE staff considered the AVA findings and recommendations. Following task force deliberations and the appointment of a new commissioner in May 1987, CHE issued *The Cutting Edge: Higher Education's Initiatives for Research and Academic Excellence in South Carolina*. In June 1988, the governor signed into law Act 629, known as the Cutting Edge legislation. CHE described this as "a major piece of legislation to strengthen quality and improve accountability in higher education."

The Cutting Edge legislation contained new initiatives to address the preparation, admission, and retention of students; the improvement of instruction and research, and the recognition of excellence in these areas; and the strengthening of planning and quality assessment for greater accountability. Specifically, Part C of Article IV, "Improving Accountability Through Planning and Assessment," required CHE to ensure that a system for measuring institutional effectiveness was in place at every public college and university. Part D required institutions to establish their own procedures and programs to measure and quantify student achievement.

Process Required

Although in accordance with CHE requirements, the Cutting Edge legislation required that all "state-supported institutions of higher learning shall establish their own procedures and programs to measure student achievement," it also specified that the program include faculty involvement in the process, tracking of student progress through the curriculum, and follow-up of graduates. A specific goal for the program was to "provide data . . . that can be used to initiate curriculum, programmatic, or policy changes within the institution."

Assessment Domains

CHE's *Guidelines for Institutional Effectiveness*, developed with input from the SCHEA Network, outlined the 18 domains on which institutions would report annually to the CHE. As part of their report, colleges and universities were expected to describe progress "in developing their assessment programs and to submit concrete, non-anecdotal, and quantifiable information on student achievement to the Commission on Higher Education."

The 18 domains required as a result of the Cutting Edge legislation were as follows:

1. Student command of core requirements in general education
2. Student command of basic knowledge in major discipline
3. Performance of professional-program graduates on licensing and certification exams
4. Reports of program changes resulting from external program evaluations
5. Alumni follow-up studies
6. Entry-level skills necessary for college work
7. Success of entering students in meeting college or university admission prerequisites
8. Remedial and developmental programs
9. Achievement of students transferring from two- to four-year institutions
10. Analysis of undergraduate retention and attrition
11. Minority student and faculty access and equity
12. Academic performance of student athletes
13. Assessment procedures for student development

14. Assessment of library usage and collection-development procedures
15. Assessment of administrative and financial processes and performance
16. Assessment of facilities
17. Assessment of public service
18. Assessment of research

STATE-LEVEL INDICATORS

Act 255, South Carolina's 1992 higher education report card, required that CHE report data or information relating to the state's public, postsecondary institutions to the governor and the general assembly in a number of new areas. Originally introduced by the chair of the South Carolina Senate Education Committee, its design was based on New Mexico's legislation. While interinstitutional comparison was not part of the plan in implementing the Cutting Edge legislation, the language of Act 255 specifically stated that annual reports must be presented so as "to easily compare peer institutions in South Carolina and other SREB states with the state's public post-secondary institutions."

Act 255 required that CHE "develop and adopt a format for the report and shall insure consistent reporting and collecting of the data in the report by the institutions." A committee made up of representatives of SCHEA Network and CHE staff developed definitions and agreed on a format for reporting, which was supported by institutional presidents and approved by the education committees of the general assembly and by CHE, pursuant to Act 255.

Process Required

Some of the 10 elements for four-year colleges and the 7 elements for two-year colleges required by Act 255 had traditionally been included in annual institutional effectiveness reports. However, under the new act, CHE was to array the information in tables and matrices to allow easy comparison of data from the three research universities, the comprehensive teaching universities and colleges, and the two-year institutions. Comparisons with other SREB states, where available, were also to be included. The narrative that was part of previous effectiveness reports was still to be used to describe the significance of the data. In addition to required data, the act defined the nature of a statewide alumni satisfaction survey. The act stipulated that "survey instruments must address the issues of overall satisfaction, satisfaction with major instruction, impact of general education, and current societal participation of alumni."

Assessment domains

Under Act 255, each four-year postsecondary institution is required to report the following data to the CHE (two-year college requirements appear with an asterisk):

1. Number and percentage of accredited programs and programs eligible for accreditation (*same for two-year colleges)
2. Number and percentage of undergraduate and graduate students who complete their degree program (*two-year colleges report on undergraduates only)
3. Percent of lower division instructional courses taught by full-time faculty, part-time faculty, and graduate assistants (*same for two-year colleges)
4. Percent and number of students enrolled in remedial courses and the number of students exiting remedial courses and successfully completing entry-level curriculum courses
5. Percent of graduate and upper-division undergraduate students participating in sponsored research programs
6. Placement data on graduates (*same for two-year colleges)
7. Percent change in enrollment rate of students from minority groups and the change in total number of minority students enrolled over the past five years (*same for two-year colleges)
8. Percent of graduate students who receive undergraduate degrees at the institution, within the state, within the United States, and from other nations
9. Number of full-time students who have transferred from a two-year, postsecondary institution and the number of full-time students who have transferred to a two-year, postsecondary institution (*two-year colleges report on transfer to and from four-year institutions)
10. Student scores on professional examinations, with detailed information on state and national means, passing scores over time, and the number of students taking each exam
11. Appropriate information relating to each institution's role and mission (*same for two-year colleges)

REVIEW AND REPORTING OF RESULTS

Comparative Data Use

CHE understood that the long-term results of the Cutting Edge legislation mandated reporting to be primarily for improvement purposes and only secondarily for accountability. Under the *Guidelines for Institutional Effectiveness*, institutions were urged to "develop reporting formats that compare their own data over time and that include narrative explanations of how findings are being fed back into the planning process to bring about positive change or continued achievement." CHE specifically stated that comparing institutions was not part of the plan.

The *Summary Report on Institutional Effectiveness*, published annually in 1990, 1991, and 1992 summarized institutional information in a few pages. The CHE report placed strong emphasis on how colleges and universities use assessment information to address problems. Consistent with Cutting Edge requirements, it attempted to focus on an institution's accomplishments and concerns within the context of its individual goals and clientele. In fact, a number of institutions implemented major changes to improve programs and services as a result of this process. In addition, CHE studied the reports and issued separate recommendations.

While the Cutting Edge legislation carefully and deliberately avoided interinstitutional comparisons, Act 255 of 1992 specifically required institutional comparability. As it was now required by statute, a format was developed to allow for easy comparison. CHE included introductory paragraphs and footnotes in order to provide clarity and avoid misrepresentation. In January 1993, CHE provided to the governor and the general assembly the consolidated *Reports on Act 255 of 1992* and *Summary Report on Institutional Effectiveness*.

Use of Quantitative and Qualitative Data

These reports include both qualitative and quantitative data. The summaries for reporting use a consistent format for each institution and the information is, for the most part, qualitative. The data reported under Act 255, by contrast, is nearly all quantitative and displayed in tables.

Use of Contextual Data

Cutting Edge legislation specifically recognized the diversity of South Carolina's colleges and universities and the tradition of institutional autonomy. For purposes of measuring institutional effectiveness, institutions were directed to design procedures and programs "consistent with each institution's mission and educational objectives." Act 255, however, makes no such mention of institutional diversity and autonomy. By publishing a consolidated report in 1993, CHE sought to provide the quantitative, interinstitutional comparative data required under Act 255, in conjunction with the contextual, institutional-specific data required by the Cutting Edge legislation.

CONNECTION TO OTHER PROCESSES

Linkages to Budget

As part of CHE's first statewide strategic plan to augment its Institutional Effectiveness Program, it recommended a strategy for modifying the appropriations formula in order to address quality incentives and accountability. CHE sought a process that could be built into the formula and thereby establish a level of formula funding at which incentives could work.

It is unclear how the data generated pursuant to Act 255 will affect higher education funding priorities in the state. According to Act 255, CHE "shall make no funding recommendation, capital outlay recommendation, distribution or certification on behalf of any public, postsecondary institution that has not submitted the information required. . . ."

Linkages to Planning

Cutting Edge legislation directed CHE to "maintain a statewide planning system to address strategic issues in public and private higher education." Four actions were called for:

- Identification of future directions and appropriate methods for meeting challenges
- Review of major goals identified by colleges and universities to ascertain their relationship to higher education
- Maintenance and development of quality
- Maintenance and continued provision of access to and equality of educational opportunity

The act also directed CHE to set an agenda for annual planning. It required that an advisory council be established to assist with planning. The act allowed public institutions to design and maintain their own planning process but required CHE to ensure that the institutions did, in fact, maintain a planning process.

Choosing South Carolina's Future: A Plan for Higher Education in the 1990s (July 1991) was the first strategic statewide plan. The principles on which the plan rested were ensuring access, ensuring student retention, ensuring real student growth and achievement, and making the higher education system and its institutions more accountable to the public. Based on those principles, four areas of priority for planning over the next decade were established:

- Developing partnerships
- Expanding participation and achievement
- Improving quality and accountability
- Establishing a continuous, shared process for higher education

In addition, accountability was built into the plan's structure through the inclusion of key indicators of progress in implementing this plan. It was structured to permit annual updating.

CONCLUSION

As the South Carolina commissioner reported, initial institutional response was "fairly hostile" to the effectiveness program required by Act 629, the Cutting Edge legislation. However, institutional concerns were tempered as campuses came to understand, through the SCHEA Network, both the high degree of control they would have over their assessment processes and the clear emphasis of the process on improvement rather than accountability.

The passage of Act 255, specifically addressing institutional accountability, caused a new wave of concern among the institutions. The SCHEA Network, however, has been able to assume considerable responsibility for developing plans for implementing statewide initiatives.

TENNESSEE

Peter T. Ewell

OVERVIEW

Tennessee provides a particularly rich case setting for the evolution of state policy on postsecondary educational effectiveness. Its "performance funding" approach — established formally in 1979 and operated experimentally for a significant prior period — was, for many years, the sole example of such a system in the nation. Tennessee's experience with publicly reported higher education performance statistics began in 1984, far earlier than in most other states. Tennessee's experience is thus far less experimental, allowing some long-term effects of policy to be separated from the inevitable disturbances caused by early implementation. Similarly, a long history not only has meant that many things have been tried but that far more is currently in place with respect to state-level statistics than in other states.

On balance, state higher education policymakers appear to have been more successful in developing and reporting state-level indicators and in using them effectively to account for and promote the state's higher education system than they have been in inducing institutions to engage in their own local planning and assessment exercises.

CHRONOLOGY AND CONTEXT

System Design and Evolution

The Tennessee system of public higher education has been unusually stable with respect to structure and governance. The Tennessee Higher Education Coordinating Board (THEC) was created in 1967 as a coordinating body and charged with a traditional array of responsibilities, including statewide master planning, institutional budget review and recommendation, and program coordination that includes the approval of new academic programs and approval and licensing authority for all postsecondary institutions operating in the state. Governing authority is vested in two public boards: the Trustees of the University of Tennessee, responsible for 4 senior campuses, and the Tennessee Board of Regents responsible for the balance of 20 four-year and two-year campuses, as well as 26 non-degree-granting vocational-technical schools. Although the spans of control of these two boards appear uneven, each has historically been responsible for approximately half the state's higher education budget. These governing arrangements have been in place for over 20 years, creating an unusually stable climate for policy evolution. Board leadership, academic staffs and key higher education legislators have also enjoyed relatively long tenures. This has enabled greater than usual opportunity for institutions and state leaders to work out practical solutions to typical problems of policy implementation.

Though funding levels for higher education in terms of dollars appropriated per full-time-equivalent (FTE) student have been comparatively low nationally, they have generally compared favorably with those of other southeastern states. Over the past two fiscal years, for example, higher education funds grew a substantial 18 percent; as the state's economy recovers, this commitment is expected to continue.

Student Demographics

The state's higher education system as a whole enrolls about 160,000 undergraduate FTE students, with a student distribution approximately at national averages with respect to average load and choice of program. The proportion of minority enrollments, however, is somewhat higher than in other states, and state policies have been unusually sensitive to monitoring and improving their success. In recent years (1989 to 1992), enrollments have grown markedly — particularly in the two-year college sector — with consequent budgetary pressures associated with serving more students with a stable budget.

Chronology of Related Priorities and Initiatives

Tennessee's initiatives with respect to accountability can be best summarized in terms of two related tracks: (1) the evolution of performance funding, and (2) the development of successive generations of statewide standard statistical indicators. Key dates are as follows:

1976: Performance funding is initiated, using non-appropriated funds to create an incentive pool of approximately 2 percent of total instructional budget to be allocated to institutions on the basis of five defined performance criteria.

1979: Formal performance funding criteria (entitled the Instructional Evaluation Schedule) are formally adopted, using appropriated funds; the pool remains at 2 percent.

1983: New, more extensive criteria for performance funding are put into place; the pool of available funds for allocation is increased to 5 percent.

1984: The legislature enacts a comprehensive reform package (TCA 49-1-302), directed primarily at K-12 education. The law mandates a joint report each year by THEC and the State Board of Education on "the extent to which goals are being fulfilled and needs are being met" and provides the basic framework for THEC annual statistical reporting for the period thereafter.

The legislature enacts a set of 19 statistical benchmarks for reporting progress in higher education (the so-called Bragg Marks, named for their sponsor Representative John Bragg) as part of larger reform effort. These benchmarks are seen as an "accountability trade-off" to obtain new funds for education through an increase in state sales tax.

1987: THEC issues a master plan and, for the first time, is able to report comprehensive statistics on statewide outcomes and institutional performance compiled through the Instructional Evaluation Schedule. The plan includes 5 comprehensive goals and 15 statistical targets for achievement.

1989: The legislature enacts *Tennessee Challenge 2000*, modeled on an SREB report, in turn inspired by the National Education Goals process. The legislature establishes statewide goals and statistical targets to be used as the basis for public reporting of higher education outcomes through 1992.

1990: THEC issues a new strategic plan consistent with the statewide plan, *Tennessee Challenge 2000*, but also incorporating 1987 master plan goals in a new form and involving lay board membership on the planning commission for the first time. Six themes for development are identified with quantitative targets for each.

1991: The legislature enacts new requirement for public institution-level reporting of benchmark statistical performance indicators (TCA 49-7-210); these are largely the same indicators as previously reported in aggregate by THEC, obtained through *Tennessee 2000 Challenge* and/or the Instructional Evaluation Schedule.

New performance funding standards are adopted by THEC for operation through 1996. The standards are considerably more quantitative and outcomes-oriented than in previous versions.

ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

State Strategy and Policy Evolution

Tennessee's approach to state policy has evolved primarily through the incentives and requirements embedded in performance funding. Unlike the indirect approach taken by other states, from the outset the requirements of performance funding involved a set of common institutional performance criteria. But a guiding principle of the program was always that the application of these criteria should stimulate local institutional improvement efforts in at least two ways:

First, the existence of statewide standards (and the incentives associated with them) was expected to greatly enhance institution-level assessment capability. In its original form, the Instructional Evaluation Schedule allowed institutions substantial credit for efforts to develop new assessment approaches — primarily in the major field, where few instruments were then available, and in the area of student and alumni satisfaction. The former area was particularly fruitful for institutions. At the University of Tennessee, Knoxville (UTK), for example, more than a third of the academic departments needed to develop sound local assessment instruments, and the process of goal development that this entailed often affected the curriculum. A parallel effect was the creation of an assessment office that became recognized for its pioneering work in assessing institutional effectiveness. Though less visible than at UTK, enhancements in assessment capability occurred at most campuses across the state.

Second, state performance standards were expected to directly stimulate instructional improvement in much the same manner as mandated targets for K-12 education challenged improvement in this area. The first two iterations of the Instructional Evaluation Schedule directly embodied the notion of inducing improvement by including a criterion that gave institutions credit for the use of assessment data in such areas as institutional program review, planning, and budgeting. This mechanism caused a pattern of institutional reaction similar to those in other states that had more indirect, institution-centered assessment mandates: most institutions were able to report progress in establishing utilization and improvement processes, but few had any actual improvements in outcomes to report.

To help foster local assessment utilization, the commission was careful not to release institutional results in comparative form, though the press generally was able to obtain them directly from institutions that did well. Thus, from the beginning, the public tone set was less one of "accountability" than of "improvement." Moreover, on many criteria, institutional results were not judged in terms of a common norm, but rather in terms of peer-group comparisons with similar institutions across the country (for example, the ACT-COMP examination) or, more interestingly, in terms of the improvement that an institution was able to register on a given indicator over time.

Process Required

The performance funding process — essentially unchanged since 1976 — requires each institution to submit data to THEC on a defined set of performance criteria. Each criterion is assigned a certain number of points, with detailed scoring guides provided on how points should be assigned. The number of points obtained results in a specified number of dollars awarded, up to the maximum percentage of instructional budget (2 to 5 percent) in effect at that time.

Assessment Domains

In the first version of the Instructional Evaluation Schedule guidelines, institutions were assessed and rewarded according to five criteria:

1. Performance in general education as assessed by the nationally-normed ACT-COMP examination

2. Performance in the major field as assessed by a nationally normed discipline or professional examination if available, or, if not available, by means of a locally-designed examination

3. Alumni satisfaction as assessed by survey

4. The proportion of eligible programs in the institution's inventory that are accredited

5. The use of assessment data in institutional planning and improvement

As noted, these were first assessed in process terms because few actual outcomes data were available. The latest version of the guidelines is far more prescriptive and outcomes oriented. Institutions are now assessed in terms of 10 standards:

1. Objective measurement of general education outcomes as assessed by means of the nationally normed ACT-COMP or College-Base examinations

2. Performance on major field examinations as assessed by available nationally normed instruments with performance compared to national norms

3. Alumni and enrolled-student surveys, with standard questions used by all institutions on student satisfaction and with performance compared to survey norms and/or past institutional performance

4. Accreditation of accreditable programs (as above)

5. Peer review of non-accreditable programs

6. Master's level program review results for universities; job placement rates for two-year institutions

7. Institutional performance in meeting minority enrollment goals

8. Institutional performance in retaining and graduating students against campus goals on these measures

9. Institutional performance in attaining identified "planning benchmarks" established through campus planning processes (but visibly related to the THEC master plan or to *Tennessee Challenge 2000*)

10. Actions taken at the institution to use the resulting data to make improvements

Examination of these domains and their evolution shows them to be quite consistent with the reporting requirements for institutions in states with more decentralized assessment mandates. Procedures for compiling statistics, however, are by the nature of performance funding far more precise and prescriptive. This evolution is partly revealed by the size of the guidelines document itself: current guidelines are more than three times as extensive and detailed as the original document governing performance funding in 1979.

STATE-LEVEL INDICATORS

State Strategy and Policy Evolution

The Instructional Evaluation Schedule was originally designed to serve a dual role. It was intended, on the one hand, to stimulate institutions to make improvements in both assessment practices and instructional performance. On the other, it was supposed to permit THEC to collect consistent statewide data that could be used politically to report progress and to justify need.

In general, the program's success has been far greater in the second of these areas. While institutional responses to the stimulus of performance were mixed, THEC quickly was able to use the data that resulted from the program in budget presentations and master plans from 1984 forward. Indeed, in its 1987 master plan, THEC was far ahead of most other states in its ability to present coherent trend data about student outcomes. The commission's executive director has long maintained that this ability was a key factor in allowing higher education to protect its budget against the competing claims of other agencies throughout the 1980s.

Statewide performance data included in the 1987 master plan were typical of the many reports THEC issued during this period. Included were data on productivity (e.g., enrollments and costs), equity (e.g., minority enrollments, persistence rates, and graduation rates), and quality (e.g., accreditation of programs and ACT-COMP results). As the Instructional Evaluation Schedule evolved and produced new data, new results were incorporated into statewide reports. For example, THEC's annual report for 1988 contained data obtained from a common alumni survey for public institutions adopted the year before as part of the Instructional Evaluation Schedule.

The passage of *Tennessee Challenge 2000* and its associated reporting requirements both extended the scope of the performance data reported publicly and, because of the linkage to a visible reform effort, considerably enhanced its public impact. As before, mandated annual reports included data on all three areas of accountability — productivity, equity, and quality — though the statistical data provided was more extensive than in past presentations. More important, the format for presenting indicators data changed markedly for the *Tennessee Challenge* 2000 reports. Instead of data being provided in a more general narrative report or being included as background in the form of tables, statistical performance data took center-stage in the presentation. The result was a "report-card" look that highlighted trends and allowed easy review by both the legislature and the public.

The final step in this evolution was the passage of TCA 49-7-210, which extended public reporting of these statistics to the institutional level. Previously, THEC had reported progress in attaining statewide goals in terms of statewide aggregates. The new law added little to the information burden as most of the required data were already being compiled. However, the shift in unit of analysis to the level of the institution signalled a major change of philosophy toward comparative reporting — a step that THEC, despite its insistence on the availability of common data on performance, had deliberately avoided up to that point.

Specific Domains Reported

Collectively, the Instructional Evaluation Schedule, *Tennessee Challenge 2000*, and TCA 49-7-210 embrace a wide range of data. Grouped specifically by case-study areas of interest, these include the following:

- Productivity indicators, including degree completion rates, lower-division credits taught by different kinds of faculty, and two- to four-year transfer rates

- Equity indicators, including minority enrollments, degrees awarded, and graduation rates

- Quality indicators, including accredited programs, remediation activities and indicators of remedial effectiveness, pass-rates on professional licensing examinations, ACT scores of entering students, ACT-COMP and major field test scores of exiting students, alumni and current-student satisfaction data, and job-placement rates by field of study

REVIEWING AND REPORTING OF RESULTS

Comparative Data Use

As noted, public reporting of performance data has evolved as follows: (a) system-level reporting by THEC of occasional data in the form of master plans and annual reports since 1984, (b) formal system-level reporting by THEC of standard data through *Tennessee Challenge 2000* since 1989, and (c) formal institution-level reporting of indicators in "report-card" form under TCA 49-7-210 (passed in 1992, now in process). Only the last of these involves direct comparative institutional reporting, though the earlier Bragg Marks involved some measure of comparison. Indeed, THEC's philosophy in administering performance funding and in the *Tennessee Challenge 2000* reports has been markedly noncomparative. Performance funding uses normed comparisons to award points, but these are generally against established peer institutions and against the institution's own past performance. *Tennessee Challenge 2000* used aggregate data only in the first report, but the two most recent reports have provided institution-level data in the appendix. From the start, THEC had the potential to supply such institution-by-institution data.

Use of Quantitative/Qualitative Data

Virtually all of Tennessee's many indicators have been quantitative, and there has been a marked trend toward greater quantification over time. Early versions of the Instructional Evaluation Schedule involved heavy use of process indicators (such as "use of information to make improvements") that involved considerable judgment on the part of THEC staff, but these have evolved considerably toward more quantitative data, largely because such data are easier to apply fairly in awarding funds.

Use of Contextual Data

THEC public reports have contained considerable commentary about the data provided, though the data themselves are clearly visible. *Tennessee Challenge 2000* reports, for instance, highlight the results obtained on each indicator but embed them in a brief textual analysis of trends and conclusions.

CONNECTION TO OTHER PROCESSES

In general, THEC initiatives in performance indicators have been linked to both budgeting and statewide master planning. This has been far less true for legislative mandates, including *Tennessee Challenge 2000* and TCA 49-7-210.

Linkages to Budget

Established in 1976, performance funding, is a direct part of the budgeting process, though at the current 5.45 percent, only a small part. More important, THEC has included trend data on ACT COMP, major field exam performance, and more recently, student and alumni satisfaction-level, as an integral part of the budget request for higher education since about 1985. In the words of THEC's executive director, performance funding is "the 5 percent of the budget that allows us to sell the other 95 percent." As additional opportunities to use performance data to make the case for higher education's budget have arisen through master planning and *Tennessee Challenge 2000*, performance data have also been used. The original *Tennessee Challenge 2000* reporting plan prepared by THEC, for instance, set specific performance targets and accompanied these with the estimated dollar amounts required to meet established goals.

The application of data to budgeting has been strengthened during the past five years as benchmarks and standards have become increasingly rigorous. Among the identified results have been a level of alumni satisfaction above national averages, a job placement rate for students of 87 percent, and measurable gains in student learning. As institutions were able to demonstrate these improvements in quality, their budgets grew commensurably.

For the most part, however, performance data have been used to make a general budgetary case rather than being more fully analyzed and presented to identify particular areas of future-funding needs. In this respect, they appear far more important for THEC as a symbol of responsible and accountable management than as a source of real planning information.

Linkages to Planning

As noted, both the 1987 master plan and the 1990 strategic plan prepared by THEC use established performance indicators and link them directly to state goals. In the 1990 plan, for instance, six goals are noted: serving students, serving K-12 schools, economic development, quality initiatives (e.g., instructional innovation and rewards for effective teaching), institutional efficiency, and using technology to serve the needs of the state. Each of these is backed by a set of objectives, most of which contain explicit statistical performance targets based on one or more of the available indicators. As in the case of budgeting, however, the use of data is largely accountability-oriented in its proposal to keep track of goal attainment.

CONCLUSION

Because of its long history of data collection through performance funding, Tennessee appears to have experienced fewer implementation difficulties in establishing performance indicators than have other states. Initiatives such as *Tennessee Challenge 2000* and the much more institutionally-threatening TCA 49-7-210 have gone more smoothly than have parallel report card initiatives elsewhere, partly because of the prior encounter with Bragg Marks in 1984–89 and partly because of familiarity with compiling data around the Instructional Evaluation Schedule. As noted, long staff tenures and a relatively stable governance context have allowed informal resolution of many reporting and public presentation difficulties. At the same time, the press in Tennessee is now far less sensationalist in its reporting of results because the process itself has lost its novelty. Statistical performance reporting in Tennessee, in short, has become simply an accepted part of doing business.

That said, the state has experienced some interesting implementation dilemmas. One is the difficulty of using direct performance incentives as a means to induce institutional improvement, as embodied in the evolution of performance funding. So long as dollar rewards to institutions are tied directly to statistical criteria, the need for fairness in the allocation process drives these criteria inexorably toward quantitative measures; at the same time, it renders their technical construction increasingly complex once statistical loopholes are removed. This process appears inevitable in any indicator system that involves high stakes for institutions.

Because the objective is quality improvement, published statistical data have been used to report progress rather than to identify need. That is, performance funding has been designed to provide additional resources for good performance rather then for rectifying identified weaknesses. In keeping with this, state-level reporting has been almost exclusively centered on documenting goal achievement rather than determining the needs of the state and the consequent priorities that higher education ought to be addressing.

The result is a pattern of data-use that strongly resembles the assumption embedded in the K-12 experience and in the current National Education Goals process: clear performance criteria are used to set targets that by their very existence induce better results at the unit level. The consequence for Tennessee is a policy evolution that is somewhat varies from that of other case-study states. In Tennessee, policy for fostering institutional effectiveness is relatively underdeveloped when compared to the state-level-accountability that historically preceded it.

TEXAS

Richard C. Richardson, Jr.

OVERVIEW

Texas has moved forward in several higher education initiatives, although with varying degrees of success. These initiatives include statewide testing, performance funding, and state-level indicators of progress on explicit higher education outcome measures. The pivotal year was 1987, when a number of these efforts first were initiated or discussed.

In 1987, the legislature enacted the *Texas Academic Skills Program* (TASP), a basic skills testing and remediation program for all freshmen entering public colleges or universities. The Texas Higher Education Coordinating Board (THECB) is required to produce reports on the results of these tests and the remediation program. Also in response to 1987 legislative action, THECB summarized higher education's initiatives and priorities in the *Texas Charter for Public Higher Education*. Priorities and goals presented in this report center on access, quality, equity, and efficiency. The charter also explicitly calls for incentive funding to reward institutions achieving the goals specified in the report. The proposal to implement incentive or "performance" funding, however, was stalled for seven years primarily due to Texas' tight fiscal environment.

More recently, the 1991 legislature passed a bill mandating the development of strategic plans by all agencies of state government, and, in separate action, charged THECB with developing performance-based funding proposals for higher education. In requiring strategic plans of all public agencies, including THECB, university systems, and individual higher education institutions, the legislature mandated annual reports on specific output and outcome measures. Also in 1991, the legislature charged the THECB to develop performance funding proposals for the health-related institutions, universities, and community colleges.

In the 1992–93 biennium, the latest performance-based funding proposals were considered but ultimately not passed by the legislature. Currently, data identified in performance-based funding proposals are collected by the Legislative Budget Board but are not linked to higher education funding. THECB is now challenged to modify the performance-based funding approach for future consideration.

CONTEXT

The public system of higher education in Texas includes 97 institutions that operate on more than 117 campuses. Thirty-seven universities and 8 health-related public institutions associated with university systems are governed by 12 boards of regents. Technical institutes are governed by a board of regents and the 50 public community college districts are each governed by their own board of trustees. The coordination of higher education comes under the jurisdiction of the Texas Higher Education Coordinating Board (THECB), which has the following responsibilities:

- Approval or disapproval of all new academic programs
- Development and updating of the five-year higher education master plan
- Approval and monitoring of postsecondary technical, vocational educational programs and adult vocational education offerings
- Authorization of public community college districts
- Resolution of disputes involving transfer of course credit between institutions
- Administering of the Texas Academic Skills Program (TASP), which ensures that new college students have the reading, writing, and mathematical skills needed for college-level work
- Monitoring the implementation of the *Texas Educational Opportunity Plan* for public higher education, designed to improve the participation of minority students in Texas higher education
- Collection and reporting of data on higher education

In addition, THECB administers state student-aid programs, interprets residency tuition and fee statutes, administers the state's research grant programs, regulates degrees awarded by private unaccredited institutions, and administers other contracts or special programs authorized by the legislature.

Student Demographics

The combined fall enrollment for Texas public higher education in 1990 was more than 785,000 students, approximately one-half of whom were enrolled in the university sector.[1] In 1980, minorities

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represented 35 percent of the Texas population. By the year 2000, they will represent 40 percent of the entire population and 45 percent of the college-age population. These demographics are not reflected in college enrollments. African-Americans, who represent 14 percent of the college-age population, represent only nine percent of enrollments in the university sector. For Hispanics, the comparable figures are 25 percent and 12 percent. Because these figures include historically African-American and predominately Hispanic institutions, they substantially overstate the success of many institutions in changing their demographics to reflect the changing composition of the population.

System Evolution: Initiatives and Priorities

There have been several major modifications to the board's authority since its creation in 1965. An important change came in 1987 when the 70th legislature charged the board to develop and administer a basic skills testing program for all entering college freshmen at public institutions, administer the funding allocations for four major research programs, develop a statewide higher education telecommunications network, conduct a sunset review of all doctoral programs, and review institutional core-curriculum policies. The 70th Legislature also changed the name of the board and its agency to the Texas Higher Education Coordinating Board (THECB).[2]

THECB summarized its initiatives and priorities within the six broad principles suggested by the *1987 Texas Charter for Public Higher Education*. These principles and a representative set of associated activities were as follows:

1. Access to higher education, including educational opportunity planning and related programmatic activities encouraging at-risk minority students to complete high school and consider college and administering grants and loan programs

2. Quality in higher education, involving efforts to improve faculty salaries; to award competitive grants to strengthen the skills of teachers and improve the quality of instruction in mathematics, science, and foreign language; to preserve the quality of degree programs; to develop the Texas Academic Skills Program; and to administer a variety of research programs

3. Diversified educational opportunity, as reflected by the approval of new degree programs and sunsetting vocational courses from the state's inventory; provision of state funds to help support the training of family practitioners to work in medically underserved areas; sunset review of doctoral programs; and review and approval of role and scope (mission) statements

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4. Funding, including support for more flexible legislative appropriations to public senior colleges and universities and for administering trusteed funds, junior college state aid, and other grant programs

5. Efficient and effective management, involving working with other agencies to address the improvements recommended in a study commissioned by the Select Committee on Higher Education; requiring all institutions to review their campus physical planning processes; and studying means to ensure that public community colleges operate within their legally defined roles and missions

6. Leadership, as represented by a demographics conference; a special committee on postsecondary medical, dental, and allied health education; a study of ways to improve educational opportunities in South Texas; and participation in a cooperative effort to implement an effective regional planning process for vocational and job training resources[3]

UNDERGRADUATE EDUCATION

Statewide Testing

There are a number of strands to state-level efforts in Texas to improve undergraduate education. Arguably, the most important and far-reaching of these has been the effort to develop and implement a testing and remediation program in higher education.[4] After visiting programs in New Jersey and Florida and interviewing a wide-range of knowledgeable individuals, the members of a committee on testing advanced seven far-sighted recommendations to cope with the approximately 30 percent of freshmen they estimated were entering college each year in Texas without being able to read, communicate, or compute at levels needed to perform effectively.

The first recommendation called for a uniform test of reading, writing, and mathematics skills for all freshmen entering a public college or university. (The test, however, was not to be used in the admissions process.) Recommendation two urged strong advising programs for appropriate course placement early in a student's degree program. Recommendation three required each public institution to make available non-degree credit remedial opportunities on its own campus to students identified by the test as needing assistance. Recommendation four required remediation whenever a component of the basic skills test was failed. All components of the test had to be passed before the completion of 60 semester credit hours. If this were not accomplished, further coursework would be limited to lower division courses until all components of the test had been passed. Recommendation five required annual reports from each college and university on the results and effectiveness of remediation.

Recommendation six called for THECB to develop the test with active participation of faculty members from Texas colleges and universities. Recommendation seven called for financial support from the legislature both to develop the test and to support institutional remediation efforts.

After the Committee's recommendations were adopted by THECB in 1986, they were enacted into law during the 1987 legislative session as the *Texas Academic Skills Program* (TASP). Although the testing component has received the most attention, the program also includes academic advising, placement into courses at appropriate levels, and remediation where necessary. To ensure that students are receiving quality academic support, an evaluation of advising and remedial programs is conducted to determine program effectiveness.[5]

The development of TASP involved several thousand faculty in identifying the necessary skills for success in an undergraduate degree or certificate program. The development of the program's evaluation component produced three principles significant to efforts to improve undergraduate education: (1) student academic progress would be monitored over time, (2) multiple indicators of student progress and performance would be developed to judge the effectiveness of remedial programs, and (3) performance of skill-deficient students would be compared with those who did not require remedial interventions.[6]

In 1992, the first annual report was published on the effectiveness of remediation for freshmen who entered colleges and universities during the 1989–90 academic year. While the report urged caution in interpreting results, it nonetheless provided a detailed listing of the results achieved by institutions along with descriptions of student characteristics.

Other Efforts

The *Master Plan for Higher Education 1990* and the *Board Action Plan 1991–92* contain other efforts to improve undergraduate education. One is developing a strong undergraduate core curricula through the periodic review of institutional reports submitted on a five-year cycle. A second emphasizes faculty attention to teaching as well as attempts to enhance professional development. THECB actions to implement the emphasis on faculty include encouraging more emphasis on undergraduate teaching in tenure and promotion decisions, monitoring the number and percent of lower- and upper-division courses taught by tenure-track faculty, and establishing recognition and incentive programs to promote excellence.

As was the case in other states, goals to improve undergraduate education are inseparably intertwined with continuing attention to access. Specific board actions promoting access include developing partnerships with public schools to increase the number of minority and economically deprived students prepared to enter higher education; providing academic and career counseling, tutoring, role models and additional student services through educational opportunity programs; eliminating economic barriers; enhancing transfer between community colleges and four-year institutions; and exploring alternative delivery systems and flexible scheduling for an increasingly non-traditional student clientele.

All these efforts have been accompanied by a continued emphasis on working with the public schools, improving teacher preparation programs, tracking students to identify exit and entry points, and maintaining freedom of mobility among institutions. A key piece of 1987 legislation (Senate Bill 543) requires postsecondary institutions to report first-year student test scores, developmental courses required, and grade point average to the sending high school or community college.

One of the most interesting trends has been the movement from input or process to output indicators. Much of the change seems attributable to an emphasis on strategic planning coming from the governor and the legislature, described in the next section of this report.[7]

State-Level Indicators

Incentive funding was proposed in the 1987 *Texas Charter for Public Higher Education* as a means of rewarding institutions that achieved specified goals. Among the 14 priorities identified in the charter were achievement of minority recruitment and retention goals; attainment of specified graduation rates; improvements in use of campus buildings; assessment of the graduate performance as a measure of general-education outcomes (for example, assessing performance of a sampling of graduates on an appropriate standardized test); and evaluation of instructional programs through a survey of students, recent alumni, and the community/employers. The legislature, however, did not appropriate funds for this early performance-funding proposal. Efforts to implement performance funding were delayed until the 1992–93 legislative session, primarily because of Texas' budget difficulties.

In 1991, the legislature took two important steps towards reviving performance-based funding. First, it passed House Bill 2009 (effective August 26, 1991), which mandated the development of six-year strategic plans by all agencies of state government. The term *agency* is defined to include THECB, university systems, and institutions of higher education. In the language of Bill 2009, "These plans were to establish performance measures and to identify outcomes which institutions of higher education should pursue."[8]

The bill specifically requires agencies to provide each of the following items:

1. A statement of mission goals and objectives
2. Measures of the output and outcome of an agency in terms of indicators to be developed
3. Identification of priority and other service populations or other service measures and how these populations are expected to change within the period of the plan
4. An analysis of the use of current agency resources in meeting present needs and expected future needs and additional resources that may be necessary to meet future needs
5. An analysis of any likely or expected changes in the services provided by the agency due to changes in state or federal law
6. Plans and strategies for meeting current and future needs and achieving the goals established for the particular area of state government
7. Other information that may be required

The administrative instructions accompanying the strategic-planning mandate place substantial emphasis on quantification. *Objectives*, for example, are defined as "clear targets for specific action, more detailed than goals objectives and have shorter timeframes and stated quantity. An objective is achievable, measurable and sets the direction for strategies." *Outcomes* are defined as "quantified results or impacts of government action. Progress is assessed by comparing outcomes to objectives through the use of measures . . . outcomes are not outputs; an output is the quantity of the service or good produced; an outcome is the result or impact of the output."

Also in 1991, the General Appropriations Act charged THECB with developing individual performance-based funding proposals for health-related institutions, universities, and community colleges. As originally proposed by THECB, performance-based funding plans were to be add-on incentive programs, constituting 5 percent of institutional budgets. Plans were to emphasize outcomes and output measures. However, in incorporating performance-based funding proposals in the 1992–93 general appropriations act, the legislature identified performance funding as a part of base funding, rather than an add-on. Furthermore, the legislative proposal suggested performance funding at 10 percent of total higher education funding. This 1992–93 legislative action did not pass, in part, because of changes to THECB's original proposals. Institutions would not support performance funding amounting to 10 percent of the base budget. Also changes in legislative leadership between 1991 and 1993 affected the bill's overall support.[9]

Currently, the data identified in performance-based funding proposals are collected by the Legislative Budget Board but are not linked to higher education funding. THECB has now been challenged to modify the performance-based funding approach for future consideration.

REPORTING PROCESS

The process of developing and using performance indicators in Texas is still evolving, as is the reporting process. Clearly, the strategic plans required of THECB and public universities will constitute the cornerstone of the process. Plans, which must be updated every two years, are designed in part "to provide a context to link the budget and other legislative processes to priority issues, to impose continuity in budgeting, and to improve accountability for the use of state resources."[10] The house bill which created this process includes the following provision:

> (section 5) Consideration of Strategic Plans in Performance Audits. The comptroller of public accounts, the Sunset Commission, the state auditor, the legislative budget board and any other agency that conducts performance audits of any agency shall consider the degree to which the agency conforms to its strategic plan in its evaluation.

Under this mandate, THECB and the universities and university systems it coordinates are more tightly bound to the pursuit of state priorities and to the reporting of progress in quantified ways. Many outcome measures specified for the system found their way into subsequent versions of the *Status Report on Higher Education in Texas*, published biennially by THECB. The January 1992 version, for example, makes reference to the framework of goals adopted as part of the *Master Plan for Texas Higher Education* and the five-year *Equal Educational Opportunity Plan*. Future reports will undoubtedly reflect the influence of the board's new strategic plan as will the companion *Statistical Report*. Even more interesting, perhaps, is the requirement that universities prepare comparable plans for which they will presumably be held accountable.

A second important element of the reporting process is the *Annual Report on the Effectiveness of Remediation*. As noted, this report provides specific information on student characteristics and performance as well as on performance of the system as a whole. The information collected for this report relates both to performance state-aid and to the distribution of funds the legislature appropriates for remediation.

Apart from these annual reports and the information collected biennially as part of the budget presentation to the legislature, THECB prepares periodic status reports on issues of concern. Examples include the fall 1990 report on *Faculty Teaching Assignments in Texas Public Universities* and the December 1991 report, *Parity 2000: Achieving Equity for Women in Higher Education*. The agency's own performance is evaluated on a ten-year cycle by the Texas Sunset Advisory Commission.

CONCLUSION

The effort to shape the state's public energies and outcomes is as large and complex as Texas itself. The tightly designed strategic planning and budgeting process is an enterprise of almost unimaginable magnitude. The leadership of this undertaking, however, is not crisply defined. In Texas, the legislature has been identified most often as the guiding force. Yet, it is instructive to note that the legislature very often acts on the recommendations of THECB committees. One good example is the *Texas Charter for Public Higher Education*.

Three primary explanations may be offered for this situation. First, the legislature and the THECB have worked closely to bring a politically powerful, non-system of institutions of public higher education into alignment with state policy, and to do so without giving up the commitment to maintain both access and quality. Second, the legislature has consistently found it necessary in this process to enlarge the scope of the coordinating board responsibilities in spite of system and institutional resistance. Third, it is particularly interesting that Texas found it necessary to create a strategic planning process as part of its effort to develop performance indicators (or vice versa). Texas had not previously been noted for emphasis on planning for its higher education system. The effective use of performance indicators, therefore, would appear to depend on the existence of a planning process that permits evaluation of indicators in relation to planned objectives.

NOTES

1. Texas Higher Education Coordinating Board, *Annual Status Report on Higher Education in Texas* (January 1992), p. 2.

2. Texas Higher Education Coordinating Board, *Texas Sunset Advisory Commission Staff Evaluation* (1988), pp. 1, 2.

3. Texas Higher Education Coordinating Board, *Long-Range Planning for Texas Higher Education* (January 1989), pp. 22-27.

4. Final Report and Recommendations of the Committee on Testing to the Coordinating Board, Texas College and University System, *A Generation of Failure: The Case for Testing and Remediation in Texas Higher Education* (July 17, 1986).

5. Texas Higher Education Coordinating Board, *Annual Report on the Effectiveness of Remediation* (August 1992), p. 5.

6. *Remediation*, pp. 6-8.

7. See Governor's Office of Budget and Planning and Legislative Budget Board, *Planning for Texas Tomorrow: Instructions for Preparing and Submitting Agencies Strategic Plans for the 1992–1998 Period* (January 1992).

8. Mark Bateman and Roger W. Elliott, "An Attempt to Implement Performance-Based Funding in Texas Higher Education: A Case Study," in R. Epper (ed.). *Focus on the Budget: Rethinking Current Practice* (Denver: ECS and SHEEO, 1994).

9. For more detailed information on Texas' efforts to implement performance-based funding, see Elliott and Bateman (1994).

10. *Planning for Texas Tomorrow*, p. 1.

VIRGINIA

Peter T. Ewell

OVERVIEW

Virginia's approach to assessment and academic planning is perhaps the most decentralized of the 10 case-study states. Virginia initiated state-mandated assessment earlier than most and quickly became known as a national model for institution-centered assessment, providing an alternative to the more centralized and standardized initiatives developed by Florida, Tennessee, and New Jersey. Widely imitated by many states between 1987 and 1990, Virginia's approach sought to fuse in a single process the agendas of improving instruction at the institutional level and demonstrating accountability on a statewide basis. The primary emphasis of the process, however, was always improving institutional effectiveness, especially for undergraduate instruction.

Statewide planning efforts visibly stressed this agenda and particularly emphasized the connection between assessment and curriculum reform. In contrast to such states as Illinois, however, there was no well-established tradition of state-level planning in Virginia when the state began its assessment effort. Linkages between assessment and improvement, therefore, were expected to be primarily institution-based, with general themes identified in state-level plans but in no way dictated by them.

Virginia's approach typified the state approach during the 1980s, emphasizing curricular renewal and experimentation in the context of abundant resources. Since 1990, Virginia's climate for higher education has shifted markedly, resulting in an evolving planning agenda and growing doubts about the long-term viability of decentralization. While no concrete mandate for performance indicators is in place, the pressure is rising for concrete, easily-understood measures of progress, and the State Council of Higher Education for Virginia has begun exploring ways to assemble institutional performance statistics on a more consistent basis.

While the track record of assessment in inducing local improvement has been quite positive, at times it has been both uncertain and uneven. Current policies on assessing and reporting effectiveness are in a period of flux. Given the state's decentralized governance traditions and its substantial existing investments in an institution-centered approach, Virginia is unlikely to abandon its commitment to this alternative. But additional mechanisms better suited to the roles of accountability and statewide planning are likely to emerge within the next two years.

CHRONOLOGY AND CONTEXT

System Design and Evolution

The extremely decentralized Virginia system of higher education has a long tradition of institutional autonomy and commitment to quality. Most of the 16 four-year colleges and universities have their own governing boards, set their own tuition rates, and make their own academic policies. Most carefully cultivate distinctiveness and consciously attempt to project a "private" rather than a "public" institutional image. The state's 24 community colleges, which are organized as a system, are considerably more uniform with respect to policy and governance. All are comprehensive community colleges offering an approximately even balance between transfer-related and occupational programs.

The State Council of Higher Education for Virginia (SCHEV) was created in 1954; in 1974, its functions were revised. The council serves as the statutory coordinating body for higher education with formal authority for statewide planning and program approval for public institutions. In addition, SCHEV prepares budget guidelines and formulas, reviews individual institutional requests, and recommends budget allocations to the state.

The council is the licensing body for all private degree-granting postsecondary institutions operating in the state. Revenues and expenditures per full-time-equivalent (FTE) student in Virginia attained relative parity with national averages by 1987 but have recently eroded due to increasing fiscal difficulties. A noticeably higher than average proportion of total revenues is obtained for Virginia public institutions through tuition charges.

Student Demographics

The state's higher education system enrolls about 225,000 FTE students, about 85 percent of whom attend public institutions. The average proportion of part time attendance is approximately equivalent to national averages, with somewhat higher proportions of students majoring in the traditional disciplines of the arts and sciences than in most other state systems.

Chronology of Related Priorities and Initiatives

Virginia's initiative with respect to assessment and effectiveness reporting involves several components. The first is mandated institutional assessment, which began in 1985–87. A second is regular state-level planning. Each biennium, SCHEV is required to report on the condition of higher education for the governor, general assembly, and the public in *The Virginia Plan for Higher Education*; this report increasingly has included assessment information. The third component is a statewide strategic-planning effort entitled *The University of the 21st Century* (U21) begun in 1988; this initiative has been used by SCHEV as a vehicle to raise issues about restructuring and about the overall direction of higher education. This reporting has taken place within the context of the state's rapidly deteriorating fiscal condition. Funding first became a factor in the 1989–90 biennium, when it brought issues of productivity and restructuring to the fore in both K-12 and higher education. Key dates are as follows:

1985: *The Virginia Plan for Higher Education*, issued by SCHEV for the 1985-86 biennium, mentions "assessing achievement" as a topic the state should address.

The general assembly passes Resolution 125 calling for a study by SCHEV "to investigate means by which student achievement may be measured to assure the citizens of Virginia the continuing high quality of higher education in the Commonwealth."

James Madison University is granted funds to implement a demonstration project intended to pilot test four different approaches in a systematic manner, each modeled on a nationally prominent institutional assessment program.

1986: SCHEV presents its response to Resolution 125 as Senate Document 14, recommending that "each institution establish an assessment program to measure student achievement" under guidelines established by the council and that the results be presented biennially as a part of the *Virginia Plan for Higher Education*. These recommendations are adopted as policy by the general assembly through Senate Joint Resolution 83.

1987: In April, SCHEV consults with the institutions and develops a set of official guidelines for the development of campus assessment plans to be submitted for approval by the council in July; these address principles and processes and direct institutions to report on achievements in general education, the majors, the effectiveness of remediation efforts, and alumni success and satisfaction.

All institutions submit assessment plans as required. To provide an incentive to cooperate, SCHEV decides to approve proposals, and at the same time, determine each institution's eligibility to receive a range of special-initiative funds. All plans are ultimately approved, though resubmission is required in two cases. Each institution also is granted additional funds to underwrite the proposed local assessment effort. Summaries of institutional plans for assessment, together with a summary of SCHEV's overall assessment approach, constitute a major portion of the narrative for the 1987-88 biennium.

1988: SCHEV issues the document, *The University for the 21st Century*, which contains a vision for higher education's future. Central themes are undergraduate curriculum reform and forging stronger linkages between higher education and society.

1989: The Virginia Plan for the 1989-90 biennium reports the first results of assessment institution-by-institution. No common data are presented, but themes of implementation are summarized in a general narrative.

The general assembly passes a resolution that includes funds for assessment as part of each institution's base budget. This regularizes the process but also allows institutions the opportunity to alter or reallocate these funds internally as they see fit.

1991: SCHEV issues a report, *Colleges and Universities for the 21st Century*, in partnership with the presidents of the public universities. Citing increasingly poor fiscal conditions, this report calls for changes in administrative structure to increase decentralized management and control. Assessment is highlighted as a positive example of how institutions are changing themselves from within. This document is included as part of the Virginia Plan.

The Virginia Plan for the 1991–92 biennium contains a second round of assessment results. These are also presented on an institution-by-institution basis, but increasingly they emphasize local changes resulting from assessment. A general narrative entitled "Assessment at the Five-Year Mark" notes successful examples but expresses growing concern that most institutions are "somewhere between results and action" and that dissimilar local assessment programs and results do not enable SCHEV to present a coherent overall picture of higher education's condition and accomplishments.

1993: SCHEV issues *Change and Improvement in Virginia Higher Education* as a second update on implementation of the *University of the 21st Century*. The report responds to the state's poor budgetary condition and emphasizes that changes in the structure, management, and delivery of higher education are imperative. Among its recommendations is for SCHEV to begin collecting common data on institutional function and effectiveness to aid planning and to monitor progress for public reporting.

Institutions submit their third report on local assessment results as scheduled for inclusion in the Virginia Plan for the 1993–94 biennium.

ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

State Strategy and Policy Evolution

Virginia's institution-centered approach to assessment reflects both the realities of its higher education structure and an explicit theory of change. Strong traditions of institutional autonomy and decentralized governance markedly constrain SCHEV's ability to develop common approaches in any arena. Because of this, it was decided that requiring institutions to engage in assessment would be the most effective means to promote lasting attention to undergraduate teaching and learning. By providing the occasion for raising important but neglected curricular questions, it was expected that assessment would induce institutions to improve from within. Once identified and reported, institutional actions would then automatically satisfy external demands for responsiveness. The same program, in short, was expected to result in both demonstrable accountability and institutional improvement.

This basic strategy was a product of the policy conditions of the 1980s. Virginia colleges and universities were then enjoying unprecedented funding levels. Questions were in the air, however, regarding undergraduate curricular coherence and reform, stimulated by such reports as tthe National Institute of Education's *Involvement in Learning* and the Association of American Colleges' *Integrity in the College Curriculum*. Consistent with what was then standard good practice in developing policy, SCHEV's approach emphasized positive incentives by underwriting much of the costs of assessment and by allowing institutions maximum discretion in determining what and how to assess. The council avoided comparisons of any kind — including the quality of institutional assessment efforts and the outcomes obtained — and viewed the biennial review process as much as a means to provide institutions with feedback on their programs as it was a mechanism for ensuring compliance. In short, the policy objective throughout was consistent: to create an ongoing, locally-owned process of continuous self-examination and improvement.

As with all decentralized initiatives, the success of this approach varied considerably with each campus's leadership and commitment to change. A number of institutions actively resisted the initiative from the outset. Others saw it as a major opportunity to engage in local efforts that they themselves had planned but for which they lacked leverage or resources to implement. Especially in the early years of the initiative, the results were very uneven across institutions. Some institutions had a great deal to report in terms of assessment activities, findings, and action while others did not. In addition, these efforts took a great deal of time to develop. The biennial *Virginia Plan Update of 1993* showed a clear track record of progress at a majority of institutions, but this was six years after institutional initiation and some eight years after the policy was formally adopted. Finally, even as rich, multifaceted and undoubtedly useful for local purposes as they were, reported assessment results did not provide a coherent "accountability story." This was not very important while funds were ample and political support for higher education sound; but its salience grew after the 1989 budgetary shortfalls and a change of administration. As fiscal conditions worsened in Virginia, the central terms of the policy agenda also shifted. With rising demand and limited resources, restructuring rather than quality enhancement became the dominant theme. The council's rhetoric and planning agenda for the nineties increasingly reflected this new theme, with the role of internal assessment in the policy scheme not as yet clear.

While these factors have led to growing uncertainty about the validity of decentralized assessment as an omnibus state policy, they have not tarnished some obvious accomplishments. Virginia's approach has had undoubted impacts on institutional effectiveness — perhaps at this point the best documented impacts in the nation. On most campuses, assessment has clearly affected and revitalized discussions about curriculum, undergraduate teaching, and learning in general. These discussions have occurred when they have been most needed — just in time to inform much harder and fiscally induced debates about academic priorities. The Virginia strategy seems, therefore, to be strong in enhancing institutional effectiveness. However, it is unclear whether emphasizing this dimension alone has been sufficient to achieve accountability and to inform a growing set of planning needs at the state level.

Process Required

The assessment process in Virginia remains governed essentially by the terms of the original SCHEV guidelines. Each institution is required to conduct a formal student-assessment program that meets specific guidelines, and to submit a report to SCHEV each biennium. This report must describe the structure of the program, the methods used for assessment, the principal findings and their implications, and any actions taken in response.

The report must cover each of the assessment domains noted in the guidelines, including general education, the major field, remedial activities and success, and alumni follow-up. The submitted report is reviewed by SCHEV and by a team of consultants to determine if the institution is in compliance and to provide institutional feedback. In the first round of reporting, expert consultants drawn from outside the state conducted the reviews, but in its latest rounds the bulk of the review has been under the auspices of a statewide committee, with a single consultant retained as an external observer.

The primary consequences of approval are that the institution is ruled eligible to participate in a range of addition-to-base incentive funding programs administered by SCHEV (many of which are not directly related to undergraduate education). This linkage provides a substantial incentive for many institutions, as such programs have remained active even in tight times. In the second years of each biennium, institutions are required to complete a brief questionnaire on current activities and progress in assessment. These are for information purposes only and are reviewed by SCHEV staff.

Assessment Domains

Assessment domains are essentially governed by the SCHEV guidelines established in 1987. According to these guidelines, institutions must report biennially on the following:

- Student achievement in general education
- Student achievement in the major field
- Current standards of college-preparedness with respect to verbal and quantitative skills and the numbers of students assessed as deficient in each of these areas
- Success of remediation programs directed at such students
- Experiences of alumni with respect to further education, job placement, and overall satisfaction

Institutions may use any appropriate method for gathering and analyzing evidence around these topics, and the resulting reports are indeed quite diverse. The major governing phrase in the original guidelines is that the resulting reports "should be concrete, more than anecdotal, and presented in quantitative form."

In some areas, however, clear behavioral standards have evolved through the ongoing review and feedback process. In evaluating the success of developmental programs, for instance, institutions are expected to have implemented a mechanism to track the grades of students exposed to such programs in order to determine their performance in later college-level work.

STATE-LEVEL INDICATORS

State Strategy and Policy Evolution

The assessment program in Virginia was intended to discharge accountability obligations without producing any statewide indicators of performance. The primary vehicle used to present system-level accomplishments — the Virginia Plan, prepared each biennium for submission to the governor and general assembly — presents a set of standard statistics on statewide enrollments, faculty, and costs, but contains no readily accessible data about educational processes or performance.

This is not to say that no information on these topics exists. The 1987, 1989 and 1991 Virginia Plan updates contain extensive state-level narratives about the assessment process. By 1989, fully half of each institution's narrative addressed the structure and findings of its assessment program. There also have been attempts to standardize these narratives by providing common headings consistent with assessment guidelines and, occasionally, by developing a tabular format for reporting. The 1989 Virginia Plan, moreover, supplemented each institution's narrative with a brief statistical profile. In addition to standard enrollment figures, this profile contained such items as "the most popular baccalaureate majors" and the percentage of instructional activity by discipline.

Reports provided through the parallel U21 process were similar. The U21 document itself, issued in 1988, was almost entirely narrative in nature, although it contained considerable environmental scanning information throughout. Both this document and the following 1991 update report also mentioned the assessment process and its continuing benefits in inducing curricular reform. As in the Virginia Plan updates, the general benefits of the assessment process are prominent in U21 reports, but these rarely contained any statistical results.

While this approach undoubtedly demonstrated that things were happening at the institutional level, it had major shortcomings as a report of progress. Several incidents in 1991–93 highlighted this difficulty, including an unfavorable newspaper report on the assessment process written by a reporter frustrated by the inability to rank institutions by quality. Similarly, SCHEV was experiencing problems in selling higher education's budget to the legislature in the absence of readily digestible statistics on performance. Reflecting these growing difficulties, the Virginia Plan's 1991–92 narrative on assessment was unusually candid: "the difficulty of Virginia's approach to assessment is that it doesn't yield one big story, but instead many small and medium-sized ones about the effects and progress of higher education."

A 1993 report by SCHEV to the governor and legislature, issued as the second progress report on the implementation of U21 and entitled *Change and Improvement in Virginia Higher Education*, suggested a shift in direction. With funding and restructuring issues at the top of the agenda, this report included a proposal that the council collect and disseminate a common set of institutional performance statistics to monitor conditions in higher education and "to tell Virginians how faculty and institutions are affected" by these developments.

Specific Domains Reported

State-level reporting of assessment results through the Virginia Plan from 1987 through 1993 continued to follow the domains established by the original SCHEV assessment guidelines of 1987. These included the following:

- Outcomes of general education
- Outcomes of the major
- Standards for determining the need for remediation by skill area, and the proportion of those entering students assessed as deficient
- Outcomes of remedial/developmental instructional programs
- Alumni success and satisfaction.

No common measures are used, and only narrative reports of findings provided. In addition institutions are expected to report publicly on several aspects of their local assessment process:

- Assignment of responsibility for assessment and levels of faculty and administrative involvement
- Procedures used to assess student achievement under each of the headings above
- Timetables for implementation
- Costs of the effort
- Actions taken as a result

These were presented in narrative form as well, with institutions largely determining both the form and the content of their individual summaries. These summaries were then included in the Virginia Plan together with a statement of each institution's mission and future plans.

Proposed common indicators contained in the 1993 SCHEV Report are far more specific, and resemble in many ways the types of performance indicators now collected by other states. Proposed indicators include the following:

- Admissions standards for first-time students and the actual scores achieved to meet these standards
- Prior high school courses taken, and levels of remediation required and engaged in by first-year students.
- "Profiles of teaching and learning" at each institution, consisting of average class sizes, the proportion of undergraduate students who experience courses taught by full or associate professors, the proportion of undergraduate students who experience small classes or seminars, and the proportion of undergraduate students who graduate with a "summarizing experience" such as a thesis, recital, or comprehensive examination.
- Graduation rates in four, five, six, and seven years, broken down by race and gender
- Post-graduation profiles of recent graduating classes, including levels of enrollment in graduate schools and employment placement rates
- Quality of the institutional assessment program in place at the institution
- Amount of extramural research funds attracted by the institution

The majority of these proposed indicators as yet have no quantitative standards, and several are "process" indicators, for which counts or ratios are inappropriate. Nevertheless, its specificity and comparative nature renders this proposal a considerable departure from traditional Virginia practice.

REVIEW AND REPORTING OF RESULTS

Comparative Data Use

The Virginia approach has historically avoided any form of direct comparison among institutions. When assessment guidelines were first developed in 1987, there was considerable controversy over the degree to which institutions should be compared. The 1987 Virginia Plan, for instance, contained tabular summaries of each institution's planned assessment approach, using categories noted in the guidelines. Even though each summary display was presented independently — together with the institution's individual assessment narrative — institutions claimed that this practice violated the original understanding that assessment results would not be used comparatively. Since that time, summary displays have been explicitly avoided and only the individual narratives presented. There has been a continuing evolution toward the inclusion of summary statistical data, though not in the outcomes area. The 1989 Virginia Plan update, for instance, contained summary data on courses taught by discipline, and enrollments and baccalaureate degrees granted by major field for each institution. But at no point has a single public display been presented containing all institutions. The 1993 SCHEV proposal for collecting standard indicators to be used for monitoring would presumably violate this tradition.

Use of Quantitative and Qualitative Data

The vast majority of Virginia's public reporting has been qualitative in nature — both in the Virginia Plan updates and in reports on the implementation of U21. Individual institutional narratives on assessment contained each biennium in the Virginia Plan average two to three typeset pages. These describe assessment procedures, general findings, and implications. But despite the guideline's directive that results be "non-anecdotal, presented in quantitative form," these summaries rarely contain any actual scores or achievement levels. Results of this kind can be obtained only by referring back to each institution's detailed report to SCHEV and those, although publicly available, are not publicly reported. Similarly, SCHEV's own narrative assessment summary prepared for inclusion in the Virginia Plan contains thematic observations only. Proposed 1993 SCHEV monitoring-indicators also contain items that are qualitative in nature — for instance, "the quality of the institution's assessment program." Predominant reliance on qualitative reporting has resulted in considerable richness and depth, but as noted, provides little ability to provide external audiences with simple answers to questions about higher education's performance.

Use of Contextual Data

The nature of the mechanisms used allows considerable reporting of context. Institutional narratives in the Virginia Plan, for instance, contain much information on the institution's distinctive mission, student clientele, and academic program — all presented prior to the discussion of assessment and its results. Most institutions also carefully explain any actual assessment results in light of their own distinctive conditions and situations.

CONNECTION TO OTHER PROCESSES

Linkages to Budget

Virginia's assessment program has been linked to other state-level initiatives and is part of an overall SCHEV strategy for inducing change. Because of the state's history and governance arrangements, though, linkages between assessment findings and any particular state-level decisions tend to be informal. Only one overt link between assessment and the budget is present — the requirement that each institution have an approved assessment program in place in order to qualify for addition-to-base incentive funds — and as noted, this link has nothing to do with the actual results of assessment. On the other hand, there is considerable evidence that institutional assessment results are used by SCHEV staff, together with other information, to help determine "Funds for Excellence" allocations to institutions or in approving new proposed programs of study. Similar connections can be traced between themes detected by SCHEV staff across a range of institutional assessment efforts and state-sponsored initiatives in faculty development. Finally, SCHEV staff report that assessment provides them with an unmatched occasion to discuss curricular issues at the local level. Increased staff understanding gained through this process, in turn, has had a considerable impact on SCHEV's own programmatic priorities.

Linkages to Planning

The relationship between assessment and U21, SCHEV's principal recent planning initiative, has been similarly indirect. U21 itself notes assessment as one of several vehicles required for curriculum reexamination and renewal. Similarly, the U21 update reports presented in 1991 and 1993 both mention institution-level assessment as having helped to shape faculty attitudes toward greater curricular coherence — especially in general education. Unlike other states, however, there is little visible use in Virginia of specific assessment results to draw particular conclusions about program needs and priorities.

CONCLUSION

Virginia's approach to assessment policy has been decisively shaped by its decentralized governance context and by a deliberate policy choice to pursue institution-centered assessment as the most promising available lever for change. Accountability per se was never intended as a central concern.

Instead, accountability was to be achieved as a natural byproduct of positive institutional response. It was felt that information for state-level planning and policy would be obtained most effectively by identifying any common issues and themes reported by the institutions themselves. For the most part, SCHEV's initiative has been successful in attaining these original purposes. Eight years later, there have indeed been notable gains in the capacities of most institutions to assess and improve their effectiveness in undergraduate instruction. At the same time, information gained through assessment has been useful to SCHEV in keeping track of local efforts, and in informing indirectly SCHEV's own planning and renewal efforts.

This achievement, however, has not been without problems. Considerable institutional resistance was encountered at the outset, especially on the part of the state's three public research campuses. Many institutions also took a long time to get started, yielding very little to report publicly in the near term. Moreover, increasingly uncertain fiscal conditions had a major impact on the implementation of a program whose major features were determined in a more favorable economic climate (providing an additional base budget allocation to institutions to pay for assessment, for instance, was a sound strategy to obtain full cooperation, but appeared to legitimize institutional decisions to cut back on assessment when funds got tight).

Funding shortfalls and an increasingly unfavorable political climate for higher education, however, appear to render Virginia's current strategy increasingly insufficient. Public demands for simple statistics on performance are becoming hard to ignore, and providing these may become inevitable as higher education argues for an adequate budget. Partly stimulated by the need to respond to poor conditions, moreover, SCHEV's own policy agenda has moved visibly toward restructuring instructional priorities and delivery. This agenda also demands more systematic and systemwide information. Together, these trends appear to be shaping a new approach to assessing performance that requires state-level as well as institution-centered results.

WISCONSIN

Peter T. Ewell

OVERVIEW

Wisconsin's experience with institutional assessment and accountability illustrates strikingly the parallel evolution of each as an element of state policy. The origins of institutional assessment in Wisconsin were rooted more strongly in traditional accountability concerns than in other states. As in states such as Washington and South Dakota, initial proposals for assessment included statewide testing and were stimulated by a need to demonstrate political responsiveness. Unlike the experiences of Washington and South Dakota, however — where such initiatives were ultimately replaced entirely by institution-centered, improvement-oriented approaches — accountability-oriented activities never entirely disappeared in Wisconsin. An institutional assessment agenda proceeded, actively led and promoted by the university system administration. Experiments with statewide testing and with the use of standard statistical indicators continued as well.

Unlike the situation in other states, moreover, fiscal concerns were strongly present in Wisconsin throughout the period in which assessment initiatives evolved. As a result, when fiscal conditions forced the strong reemergence of accountability concerns nationally in the 1990s, the state was positioned to have it both ways.

CHRONOLOGY AND CONTEXT

System Design and Evolution

Since 1974, the Board of Regents of the University of Wisconsin (UW) has served as the system's statutory governing authority. The board has direct responsibility for the state's unified university system, consisting of 2 doctoral institutions, 11 four-year campuses, 13 lower-division university centers, and university extension. Wisconsin's 16 vocational-technical institutions are governed separately by the Board of Vocational, Technical, and Adult Education, which maintains close liaison with the UW Board of Regents on statewide planning issues. Twenty-one independent higher education institutions make up the balance of higher education in the state, but they enroll only a small proportion of its students. These governing arrangements have been in place since 1974, and they have produced a stable and fairly traditional array of systemwide policies and procedures. Since about the mid-1980s, the board has become more proactive with respect to master planning for the UW System.

Student Demographics

The state's higher education enterprise enrolls about 225,000 full-time-equivalent (FTE) students, more than 85 percent of whom attend public institutions. Fields of study approximate national patterns at both the baccalaureate and masters/first professional levels, with the exception of agriculture where the proportion of graduates is significantly above average. The percent of minority students is lower than the national average, reflecting the state's population.

During the 1980s, one significant difference between Wisconsin and other states was the low levels of available funding per student, especially in the system's four-year public sector. Efforts to raise public funding levels for higher education in recent years have been intimately bound up with greater accountability. More recently, the funding gap has all but disappeared due largely to enrollment management policies begun in 1987.

Chronology of Related Priorities and Initiatives

Wisconsin's initiatives with respect to assessment and accountability are diverse and have often been embedded in other policy initiatives. Nearly all have been conducted under the auspices of the UW Board of Regents, though several were stimulated directly or indirectly by actors outside the higher education community. Key dates are as follows:

1986: The board issues *Planning for the Future* as the state's master planning document. The report notes "sliding levels of financial support" for higher education — together with growing enrollment demand — as a significant threat to quality. "Assessment of quality and educational outcomes" is one of 20 recommendations presented for future planning.

1987: In February, Governor Tommy Thompson writes President Kenneth Shaw of the UW System to express "concern about the lack of our ability to measure student progress." The letter supports board plans for assessment and the university's plan to implement a systemwide assessment program by the fall of 1991. In September, a UW System Assessment and Testing Advisory Council is appointed by the UW System president.

1988: In January, the UW System sponsors an initial statewide conference on assessment that includes representatives from several states with past experience in implementing assessment. A prominent theme of the conference is combining what has worked in other states with assessment approaches adopted by individual UW institutions. At the same time, the system administration funds several campuses to experiment with local assessment.

1989: In May, the recommendations of the UW System Testing and Assessment Council, first presented in September 1988, are accepted as UW System guidelines for assessment. These establish an institution-centered assessment approach, much like that initiated in other states. Institutions are required to develop their own local assessment programs consistent with a set of systemwide guidelines and to report results to the board by 1991.

1990: The board adopts a comprehensive *Academic Quality Program* (AQP) that includes the establishment of institution-centered assessment programs and a statewide assessment of verbal and quantitative skills.

1991: In February, the board mandates a pilot study of standardized assessment of sophomore-level verbal and quantitative skills, using the ACT-CAAP examination.

1992: In July, the board issues a new report on undergraduate education entitled *The Undergraduate Imperative: Building on Excellence*. The report is the result of an evaluation of the "comprehensive state of undergraduate education in the system" begun in the spring of 1991, involving public hearings and campus visits by a board working group. The report proposes initiatives in four areas — general education, improving teaching, helping students to succeed, and improving partnerships with K-12 and two-year institutions — and contains the assertion, "for each policy area . . . appropriate accountability measures have been built . . . to ensure timely action and identification of improvement needs." Consistent with this philosophy, a set of standard statistical indicators (such as graduation rates) are presented as "consumer information" to be part of the regular 1992–93 system profile provided to prospective students and the public.

In August, the Governor's Commission on UW System Compensation also issues its report. This commission was formed in response to ongoing fiscal problems in the system, in particular its inability to recruit and retain new faculty. The final report goes well beyond the commission's initial conception by raising comprehensive funding and accountability issues. In essence, it proposes to offer increased budgetary flexibility for the university system in return for visible accountability measures. Among its recommendations is the establishment of a statewide task force charged "to identify . . . specific measures of performance" for the university system.

In September, the UW System reports to the board on the results of the pilot study using ACT-CAAP. The board mandates that a similar systemwide study be carried out again once a value-added component is available.

1993: In March, the Governor's Task Force on UW Accountability Measures is established under Executive Order 177. Its report, completed by June, recommends the development of core indicators to be produced for all institutions as well as specific indicators to be developed by each institution consistent with its mission.

ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

State Strategy and Policy Evolution

As noted, Wisconsin's policy approach was in many ways typical of states that developed assessment initiatives in the late 1980s. Approaching the topic somewhat later than others, the board of regents was able to learn from other states' experiences. At the same time, at least in the early stages, it had the luxury of time: more than three years elapsed between the point at which assessment first surfaced in *Planning for the Future* and the formal adoption of an institutional assessment policy.

The result was an unusually deliberate path of development and a resulting policy that in many ways incorporated the best practice of late 1980s assessment policy. The systemwide conference on assessment held in January of 1988, for instance, included presentations by nationally-known assessment commentators, pioneering institutions like Alverno and Northeast Missouri State, and representatives of states with established assessment programs such as Virginia and New Jersey. The message conveyed (and warmly received by institutional audiences) was that institution-centered, improvement-oriented policies would pay far more dividends for Wisconsin than would mandated testing. Similarly, the UW System Testing and Advisory Council produced a document that cited virtually the entire emerging literature on institutional assessment practice at that time. Its recommendations, in turn, were highly consistent with institution-centered principles advanced by leading contemporary assessment advocates. During this time, system administration funded a number of pilot demonstration projects at $25,000 each, with the requirement that they report their experiences for the benefit of the entire system.

By the time this deliberate path of development was completed in 1990, however, institution-centered assessment had already become part of a wider policy agenda. Broader concerns about undergraduate quality had stimulated the AQP program, and the assessment of institutional effectiveness was made a part of it. While this was happening, the North Central Association (NCA) issued its own requirements for the assessment of learning outcomes — requirements that mirrored the UW System administration requirements and gave validity to the institution-centered, multiple measures programs being developed at the institutions. At the same time, the Governor's Commission on Compensation was beginning its work, the results of which were to reestablish the accountability agenda on a new foundation.

It is important to note that not all UW institutions proceeded at the same pace. Some UW System institutions had assessment programs before they were mandated (UW-Stout, UW-Superior), in some cases far in advance of the others (UW-Green Bay). Other institutions developed strong programs consistent with their missions and began using the results. Many of these were noted favorably in reports to the board on the progress of AQP in the period 1990–93. But other campuses did relatively little. By September 1992 when the board of regents was asked to identify the next steps, system administrators recommended continuing local assessment measures. The board agreed, but also elected to include systemwide sophomore testing using the ACT-CAAP once a value-added component was available.

Process Required

According to the AQP adopted by the board of regents in 1990, each institution in the UW System has been required since fall 1991 to develop a process for assessing students' verbal and quantitative skills at the end of the sophomore year. Rather than mandating a single approach, however, the policy allows each campus to develop its own measures. In addition, institutions are required to go beyond these identified skill areas to assess teaching and learning in general education and in the major — a requirement reinforced by NCA's reaffirmation requirements. Each institution's assessment program is expected to be informed by the set of principles embodied in the final report of the UW System Testing and Assessment Advisory Council. As noted, these were consistent with the tenets of the most successful assessment programs in other states. The principles were as follows:

- assessment should "be developed with faculty and staff leadership, and student participation"
- each institution should establish a body to oversee assessment "consistent with local governance procedures"
- institutions should "survey existing assessment procedures and use them as a foundation for further assessment"

- assessment procedures should be "carefully examined to ensure a high degree of validity and reliability"

- "special care should be taken to insure that assessment is fair to ethnic and minority groups, both sexes, persons with disabilities, and members of all social classes"

- "care should be taken to avoid the misuse of assessment data" (examples of misuse included the use of results to bar individual student progress or to sanction individual faculty members)

- assessment programs should be "periodically evaluated and revised as necessary"

In addition, the advisory committee recommended that special funding be provided to support local assessment efforts consistent with these principles, and that such support should come from "new allocations rather than [from] reallocating existing resources."

Assessment Domains

The council's recommendations specified that all institutions develop programs to assess verbal and quantitative skills. However, the council also recommended that institutions go beyond these domains to "evaluate the educational process in a variety of ways." Among those specifically noted in the text of the recommendation were the following:

- general education (methods to be decided by institutions)

- proficiency in the major (through such techniques as "comprehensive examinations, projects, performances, or portfolios")

- student development and the institutional environment (including "participation in extracurricular activities, attendance at cultural events, use of the library, and the degree of student satisfaction with faculty advising, student services, and campus living conditions")

- the success of graduates (including alumni surveys, employer surveys, and performance and placement in graduate programs)

Later documents also emphasized the link between local provisions of the AQP and NCA assessment guidelines. These required institutions to develop explicit learning outcome goals and to periodically assess the attainment of each. The choice of these goals was left up to each institution.

STATE-LEVEL INDICATORS

State Strategy and Policy Evolution

Unlike many other states, Wisconsin included the concept of developing a limited set of state-level indicators of effectiveness largely for accountability purposes right from the start. Both the regents' 1986 recommendation in *Planning for the Future* and Governor Thompson's 1987 letter to President Shaw carried the clear implication that summative measures of performance should eventually be implemented and their results should be publicly reported. While local assessment policies were being developed by institutions between 1987 and 1990, statewide testing was never really abandoned.

Pilot studies of the feasibility of statewide testing using the ACT-CAAP were conducted in 1991–92 to provide a policy alternative to local assessment. At the same time, the system began experimenting with additional publicly-reported standard statistical indicators with the inclusion of descriptive data for each institution in the widely-distributed UW System *Statistical Profile*. But the major impetus for this line of development came from an unlikely source: the Governor's Commission on System Compensation.

Wisconsin differed from other states in the 1980s because fiscal difficulty was a major theme for the state. By 1985, what had once been a "model system" was significantly underinvested, a fact noted prominently in the regents' 1986 report. The Commission on Compensation was convened in response to a specific manifestation of this problem, the growing inability of the UW System to recruit and retain nationally-prominent faculty. Addressing this problem, however, required the commission to raise additional issues.

Foremost among them was the fact that existing regulations and practices often prevented the system's institutions from using available resources appropriately and flexibly. After considering these problems, the commission recommended an alternative, more decentralized approach. But they made its implementation conditional on the system's adoption of an explicit set of accountability measures. Specifically, the commission recommended that "the System should be held accountable in [the areas of] effectiveness, efficiency, quality, access, diversity, stewardship of assets, and contribution to compelling state needs," and that an additional task force be appointed to "identify the specific indicators to be utilized to measure performance in these general areas."

The resulting Governor's Task Force on UW System Accountability Measures completed its report in June 1993, after only three months of work. Its findings strongly endorsed the notion of budgetary flexibility being contingent on accountability. Both reports also made prominent use of such terms as *stakeholders* and *continuous quality improvement* in advocating the adoption of performance measures.

Recognizing this shift in language, both the commission and the task force acknowledged that core governance and management practices would eventually be affected. In his transmittal memo to the governor, for instance, the chair of the task force emphasized that "the proposed accountability system redefines the relationships and responsibilities among UW System officials, legislative and executive branch decisionmakers, and the citizens of Wisconsin. . . . We believe that it recasts these relationships in ways that are healthier and more productive. . . ." Consistent with this statement, the task force recommended the development of performance indicators around three priority areas: (1) delivering a high-quality undergraduate education, (2) meeting the needs of business and other constituency organizations, and (3) being "customer-oriented and responsive to customer concerns." And in contrast to prior assessment policies, they additionally recommended that reports should be public, that explicit standards or targets of performance be adopted, and that there "be consequences for failing to act to meet the accountability goals and rewards for special efforts which lead to success in meeting the goals."

Superficially similar to the legislative report-card approaches of states such as Kentucky and South Carolina, these recommendations represented a fundamentally different strategy. First, the perspective of reporting was placed clearly upon documenting the benefits of its higher education system to the state and its citizens. Second, the potential linkage between results and policy action was made clear: indicators were intended not only to report on performance after the fact but also to guide the development of overall system policy. Similarly, system officials welcomed the opportunity to make accountability measures specific and predictable; in the past, they felt they had frequently been "whipsawed" by disconnected and often contradictory definitions of performance.

Finally, the intent of reporting was not just to document system performance but also to positively shape institutional behavior. A clear objective, embodied in the third recommendation of the task force, for instance, was the development of a systemwide commitment to accountability as reflected in changed institutional management practices, greater consciousness of student needs and opinions, and the development of informative consumer information.

Specific Domains Reported

As a result of this history, systemwide indicators in Wisconsin are of two kinds. The first is composed of statistics that are readily available from the system's unit record enrollment files and contained in the UW System *Statistical Profile* report, issued since 1992–93. This profile primarily contains descriptive information such as enrollments, numbers of faculty, and degree programs offered. But specific elements of institutional performance also are included in the document:

- numbers of degrees granted (undergraduate and graduate)
- percentage of undergraduates completing programs (both at the institution and at any other UW campus)
- average time to completion for undergraduates
- percent of undergraduate courses taught respectively by regular faculty, other instructional staff, and teaching assistants
- average class size
- percentage of undergraduate lecture sections enrolling more than 100 students

The second reporting component consists of the indicators proposed by the Task Force on Accountability Measures, which followed the lead of the Commission on Compensation. These are far more extensive than the data elements contained in the *Statistical Profile* and, in many cases, will require new kinds of data collection. Suggested indicators are grouped under the headings proposed in the report of the Commission on Compensation:

Quality

- results of student satisfaction surveys on such matters as course availability, accessibility of faculty, advising, and "other aspects of the undergraduate experience"
- results of alumni surveys on such matters as career status, further education, and civic participation
- the percentage of lower-division undergraduate enrollments and contact hours taught respectively by regular faculty, other instructional staff, and teaching assistants
- the dollar value of externally funded research and contracts

Effectiveness

- results of the systemwide competency test (ACT-CAAP) or alternative equivalent testing at the sophomore level

- graduation rates for undergraduates (both full-and part-time)

- GRE and LSAT scores for graduates, job placement rates, professional and graduate school acceptances, pass-rates on licensure examinations, and "other data showing the post-graduate experience of UW undergraduates"

Efficiency

- average credits-to-degree for baccalaureate graduates, and the proportion of starting freshmen who complete in four years, by residency

- proportion of payrolled employees and funding for institutional support, academic support, instruction, and student services

Access

- percentage of qualified resident undergraduates accepted for the system as a whole, and the proportion of Wisconsin high school graduates enrolling immediately in the UW system each year

Diversity

- progress toward meeting established affirmative action and equal opportunity goals for staff and faculty

- number and residency of minority students, together with their graduation rates

- reported number of incidents of sexual harassment

Stewardship of Assets

- recruitment and retention rates for faculty, and resources dedicated to faculty development

- progress on addressing preventive maintenance needs for university facilities

- number and severity of accidents, injuries, etc., incurred by the UW system

Contribution to Compelling State Needs

- results of surveys of employers on such matters as the career preparation of graduates and responsiveness of the university system to their needs

- enrollments in continuing education programs and the assessment of students participating in such programs

About half of the indicators proposed by the task force are already collected in some form by the system, but many are not compiled or calculated as indicated. All but one of the remainder (pass-rates on licensure examinations) are items that the system has already committed to collecting.

REVIEWING AND REPORTING OF RESULTS

Comparative Data Use

With regard to comparative data, the Wisconsin approach is to try to satisfy two sets of needs. With few exceptions, each institution is required to collect standard statistical indicators such as those already contained in the profile and recommended by the task force. At the same time, institutions are free, and in fact encouraged, to develop and report their own, mission-specific indicators to be placed alongside core comparative statistics. Obviously, if the full intent of the task force recommendations were to be implemented, comparative data use would be mandatory, because standards would be set and consequences attached to performance at designated levels. At the same time, in both the profile and the task force recommendations, the state has shown unusual care in ensuring that such statistics are reported fairly and interpreted correctly. Explicit safeguards in reporting, for instance, are provided when numbers are small or statistically suspect or when the presentation of a given statistic alone might lead to misinterpretation.

Use of Quantitative and Qualitative Data

Virtually all indicators currently used in the profile and proposed by the task force are quantitative. Some of the latter, however, are less numeric than they are indicative of the presence or absence of progress on a given dimension — for example, progress in meeting affirmative action goals or in addressing preventive maintenance needs for facilities. The text of the task force report also emphasizes that indicators can be either quantitative or qualitative, although the majority of the examples actually provided are of the former.

Use of Contextual Data

The use of data is at present unknown, although the grouping of proposed task force indicators by analytical category will presumably require some explanation. The profile suggests that such a strategy will likely be followed. Although quantitative results in the profile are presented in tabular form to enable ready comparisons among institutions, each table is also accompanied by a brief explanation that cautions readers about making inappropriate comparisons. At the same time, the profile itself is contained in a larger descriptive context, which presents the mission and important characteristics of each campus.

CONNECTION TO OTHER PROCESSES

Although there is a clear intent to do so, accountability and assessment have as yet not been explicitly linked to other state-level decision processes. Institution-level assessment practices consistent with system policy are intended to be locally run and applied; the board has not as yet received detailed reports of institutional activities and results upon which policy judgments, if intended, could be based. Statewide statistical indicators are also too new to allow them to serve as a reasonable guide to policy.

Linkages to Budget

Wisconsin's current strategy with respect to accountability indicators is, in at least one respect, strongly tied to budget. The existence and effective operation of the proposed accountability system is seen by the board as a key to leveraging budget flexibility. Faced with the proposed contingency contained in the compensation commission's proposal for new kinds of accountability measures, the board has been willing to accept these as a precondition for a new budget compact. In this sense, Wisconsin's linkage between performance indicators and budgeting resembles that of Tennessee. For both states, the symbolic and political importance of the initiative for higher education's leadership far outweighs the direct value of the indicators themselves in informing policy. But implicit in the report of the

Accountability Task Force are some long-term implications. The recommendation that explicit standards be established and that consequences for institutions be associated with these standards clearly signals an intent to go farther. It is unclear at this point the degree to which the board intends to use indicators to establish new systemwide priorities based on what is found (as, for example, is beginning to occur in states such as Virginia).

Linkages to Planning

As in the case of resource allocation, it appears that the system intends eventually to use the resulting data to help inform system-level planning. Because the initiative is so new, however, this premise has yet to be demonstrated. Unlike such states as Virginia or Tennessee, current initiatives in assessment and accountability in Wisconsin did not arise from a deliberate planning context in which past assessment results are presented to the public, together with plans and recommendations for the coming years. Planning documents in Wisconsin do address assessment as policy — but as yet contain little assessment data.

IMPLEMENTATION PROBLEMS AND CONCLUSION

The overwhelming conclusion of the Wisconsin experience is that it is vitally important to keep options open. Rather than abandoning a systemwide indicator approach when many other states did so in the mid-1980s, Wisconsin embraced an institution-centered approach, even as it continued to experiment with the ACT-CAAP and to refine available performance measures derived from unit record data. In this, the UW Board of Regents had substantial advantage over their counterparts in such states as Virginia and Texas. But in doing so, Wisconsin was also well positioned to distinguish clearly between institution-based improvement-oriented assessment at the campus level and necessary statewide accountability measures. This distinction appears particularly important in today's state policy context.

EFFECTIVENESS IN UNDERGRADUATE EDUCATION: AN ANALYSIS OF STATE QUALITY INDICATORS

Richard C. Richardson, Jr.

Higher education in the United States is an enterprise of considerable magnitude. In the most recent year for which data are available, public colleges and universities spent more than $85 billion to educate nearly 11 million students. Not surprisingly, policymakers want to know more about the returns on this higher education investment. Efforts to define suitable indicators for assessing quality have become a priority in many states. If state coordinating and governing boards fail to satisfy the needs of elected officials, legislators may mandate measures that fail to take into account legitimate institutional concerns.

A working consensus is needed about the nature of *quality* and what purposes quality indicators should serve. This paper attempts to answer four fundamental questions:

1. What indicators have been developed among the 10 states that appear to be in the vanguard of efforts to assess the outputs and outcomes of their higher education systems?

2. How has the development of particular indicators been affected by changes in higher education governance?

3. How can indicators be designed to reconcile the tensions between a professional emphasis on institutional improvement and a state policy emphasis on institutional accountability?

4. What are the implications of assessment and accountability measures for state and institutional policy?

This analysis begins by considering briefly how states form and implement higher education policies. The experiences of the 10 states are then examined to see how specific state-level indicators have been used. The indicators are considered from the planning perspective and in the context of efforts to define quality and "reinvent government." The analysis leads to the conclusion that state and institutional assessment goals may be more compatible than many believe. Finally, a conceptual framework is presented for identifying and defining indicators that may help reduce tensions between efforts aimed at institutional improvement and those focused on accountability.

POLICY FORMATION AND IMPLEMENTATION

Higher education policies reflect the core social values of choice, equity, efficiency, and quality.[1] *Choice* involves the freedom to pursue (or not pursue) one's own preferences in one's own way. *Equity* relates to who attends which institutions and studies which majors, and what happens to them as a consequence. *Efficiency* concerns the benefits of education in relation to the costs. Useful indicators must acknowledge the close relationships between *quality* and the other three sometimes complementary, sometimes conflicting values.

Each state selects quality indicators within a political and fiscal environment produced by its own distinctive history and culture. The use of quality indicators makes the most sense in a state where higher education purposes and priorities have been explicitly identified and communicated to institutions, and where the same or similar priorities have been pursued for some period of time across governors, legislators, and other policymakers. The rule is always, "What is valued gets measured, and what is measured gets valued."

Appointed and elected state officials use four types of instruments to encourage institutions to respond to state policy. Mandates prescribe actions, inducements provide monetary incentives for desired actions, capacity-building helps to develop human and physical resources essential to desired actions, and system-changing creates new authority for responding to public needs.[2] To avoid institutional resistance, inducements and capacity-building are the preferred policy instruments under ordinary circumstances. Among the case-study states, Virginia uses challenge grants to make quality enhancement a priority. They have also been prominent in New Jersey and Ohio. However, special programs often produce limited results as they lack leverage for changing mainstream practices (readjusting the balance between research and teaching, for example). Also, unlike appropriated base funds, special add-ons are highly vulnerable to funding cut-backs, as shown by the reduction or outright elimination of challenge programs in all three states mentioned above.

State leaders often find that indicators help them make tough choices between competing values and priorities. Appointed officials, who typically experience closer institutional ties, often prefer indicators that provide insight into improving institutional performance, although it is rare for these officials to use the indicators as summative judgments to reward or punish institutions (the Tennessee Performance Funding Program is an exception, of course). Elected officials, who often have less technical knowledge, less time, and more skepticism about institutional intentions, are more inclined to use the quality indicators to punish or reward institutions; they tend to believe that assured compliance is better than inducements offered in the hope some institutions will choose to respond. Both perspectives can be found in the 10 case-study states.

DEVELOPMENT AND USE OF INDICATORS IN CASE-STUDY STATES

Linkages to Planning and Budget

Some states have used quality indicators in conjunction with a strategic planning process in order to measure system or institutional progress toward achieving state priorities. Tennessee, for example, has a significant strategic planning history. Its early use of performance funding was designed to ensure institutional attention to state priorities. The master plan for 1987–93[3] sets forth 5 principles and 15 targets. The principles establish goals related to mission definition; general education competencies; relationships with other sectors of education, business, and industry; quality; and access. The targets represent measurable objectives to be attained during the period covered by the plan. Some targets clearly require state-level policy action (e.g., "develop comprehensive financial aid programs and reward meritorious institutional performance"). Other targets call for action at the institutional level (e.g., "increase the level of job placement for two-year graduates," or "exceed the national norm in baccalaureate student performance").

While the approach taken by Tennessee has been driven by state higher education priorities, higher education policymakers have been more successful in "developing and reporting state-level indicators and in using then effectively to account for and promote the state's higher education system than they have been in inducing institutions to engage in their own local planning and assessment exercises."[4] Perhaps this is the case because "performance data have been used to make a general budget case" with relatively little evidence of the information being used analytically to "identify particular areas of future-funding needs."[5]

Colorado, Florida, Kentucky, and South Carolina all appear to have been influenced by Tennessee in their adoption of indicators. The difference is that accountability was imposed by legislators rather than by a state coordinating board. In none of the four states was much consideration given to ongoing planning in the choice of indicators. However, state political leaders did consult with coordinating boards in Kentucky and South Carolina in the implementation of the selected indicators. In Colorado and Florida, institutions were expected to assist in implementation. In all of these states, imposing indicators provoked institutional anxieties and some resistance. Currently, each state requires a set of indicators to be reported annually in a format useful to policymakers.

The planning process itself has been the focus of efforts to develop and report quality indicators in Illinois, New York, Virginia, and Wisconsin. Illinois is a particularly strong case-study example. In this state, assessment measures have been the product of group planning focused on defined areas (e.g., undergraduate education, productivity, faculty, and affordability). With the exception of Illinois, where indicators have been used to identify programs that are candidates for merger or discontinuance, there is little evidence of institutional anxiety or resistance to assessment in these four states. In part, this is because the process has been very evolutionary and incremental. Also, New York, Virginia, and Wisconsin are still in the very early stages of development, with no apparent agreement at this point on common institutional indicators that might permit interinstitutional comparisons. The approach taken by these four states is consistent with professional and institutional concerns about a focus on improvement. At the time the case studies were undertaken, however, none of these states had been successful in producing the type of report sought by state policymakers, one that would allow for institution-level examination and comparison.

The Texas approach is the best example of a state combining accountability with institutional improvement. Ironically, it is the state that has arguably done the least amount of higher education planning. This changed in 1991 with the adoption of HB 2009, which mandated strategic plans for all state government agencies, including university systems and higher education institutions: "Plans, which must be updated every two years, are designed in part 'to provide a context to link the budget and other legislative processes to priority issues, to impose continuity in budgeting, and to improve accountability for the use of state resources'."[6] The legislation also required regular performance audits.

Like Tennessee, Texas intends to link indicators to performance funding. The 1991 General Appropriations Act provided for performance state aid to be distributed by the coordinating board only after certifying that institutions had attained appropriate performance levels on eight indicators established by the legislature. While no funds were appropriated for performance state aid in 1991, the coordinating board has been working on funding formulas that will take these indicators into account.

CATEGORIZING QUALITY INDICATORS

Inputs/Outputs/Outcomes Model

The model Texas has employed is a useful way of classifying indicators. The state planning process distinguishes among "statements of purpose, statements of direction and statements of impact." *Statements of purpose* relate to agency mission. *Statements of direction* are concerned with agency goals, objectives, strategies, and action plans. Central to the development of these are inputs defined as "the resources that an agency uses to produce services, including human, financial, facility or material resources."[7] *Statements of impact* give rise to output and outcome measures. Output measures "are tools or indicators, to count the services and goods produced by an agency." Outcome measures "are tools or indicators, to assess the actual impact of an agency's actions."[8]

Texas is not alone in its recognition of the need to tie priorities to the budget. A popular book among state policy officials, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, identifies the budget as the lever that drives government most powerfully and argues that results-oriented organizations must find ways to "develop budget systems that fund outcomes rather than inputs." The authors add that one of the simplest means of accomplishing this is to add output and/or outcome measures to a "mission driven budget." Outcomes are a measure of quality; outputs are a measure of the volume of what an organization produces.[9]

Using the definitions supplied in the Texas strategic planning guide and in *Reinventing Government*, it is possible to classify the indicators identified in the 10 case-study states. Table 1 lists input indicators. None of the 15 indicators in the input category has been identified by more than 4 states. All of the case-study states that adopted input indicators appear to have done so to improve quality, efficiency, or equity. Most states are not very interested in input measures unless they have some obvious utility such as measuring progress toward achieving a state priority.

Table 2 summarizes state activity in relation to output indicators. Clearly, states have more interest in outputs than inputs. In fact, the number of input measures included among state indicators would probably be even fewer if it were not for institutional pressures to include measures that demonstrate underfunding in comparison with peers in other states. There also is greater consensus among states about essential output indicators. All the states are concerned about enrollment, retention, progression, and graduation data. Most monitor for several categories of student as evidence of equity as well as efficiency. State concerns for equity and efficiency also are apparent in the attention given to students in remedial courses. State priorities for economic development are reflected in the reporting of external or sponsored research funds. Other state priorities reflected among the output indicators include articulation between two- and four-year institutions and the avoidance of unnecessary program duplication. Obvious state interest in output measures reflects concern about the relationship between costs and benefits in the services provided by public agencies.

TABLE 1

INPUT INDICATORS IDENTIFIED (I) OR ADOPTED (A) BY STATE

INPUT INDICATORS	CO	FL	IL	KY	NY*	SC	TN	TX	VA	WI**
Availability of academic programs	A		I		I					
Average faculty salary	A		I							
Availability of student financial aid	A									
Faculty diversity	A				I					A
Student/faculty ratios	A									
Sustained financial commitment to instruction	A				I					A
Alumni and private contributions	A				I					
State appropriations per resident student		A			I				I	
State appropriations per capita	A				I				I	
Lower division courses taught by full-time faculty, part-time faculty and graduate assistants							A	A	I	A
Classroom and lab utilization		A	I	A						
Average class size			I						I	A
Student characteristics			I			A				
Charges to students			I		I					
Facilities maintenance										A

* *Analysis limited to the SUNY system*

** *Analysis limited to the University of Wisconsin system*

TABLE 2

OUTPUT INDICATORS IDENTIFIED (I) OR ADOPTED (A) BY STATE

OUTPUT INDICATORS	CO	FL	IL	KY	NY*	SC	TN	TX	VA	WI**
Enrollment, progression, retention and graduation by race, gender, disability and high school achievement	A	A	I	A	I	A	A	A	I	A
Students in remedial courses; students exiting remedial courses and completing entry-level courses.					A		A	A	A	I
Total student credit hours produced by institution and discipline		A	I	A	I					
Course completion rates						I			A	
Student transfers between two- and four-year institutions			I		I	A	A			
Two-year transfer students completing four-year degrees			I	A						
Total degrees awarded by institution and discipline		A	I	A			A			A
Time to degree and number of credits by institution and degree		A		A						A
Total contact hours of instruction by faculty rank, institution and course level (faculty workload)			A		A	I				
National faculty and student awards					I					
External or sponsored research funds	A		I	A	I			A	I	A
Continuing education/extension enrollments and public service activities			I	A						A

* *Analysis limited to the SUNY system*

** *Analysis limited to The University of Wisconsin system*

An emerging state interest in outcome measures is evident in table 3. While some of the indicators identified as output measures in table 2 might be classified as outcome measures, the defining characteristic of outcome indicators is their effort to identify qualitative differences in institutional performance. Often this is done, as in the case of admission standards and measures, by comparing institutional intentions with performance. Outcome indicators consider differences in institutional mission and objective to a greater degree than either input or output measures. Because of their complexity, good outcome measures are difficult to define. Kentucky, South Carolina, Tennessee, and Wisconsin are clear leaders in using these types of indicator. Illinois, New York, and Virginia are among the states demonstrating the most interest in their potential use. Interestingly, all are strong planning states.

The chronological development of input, output, and outcome measures reflects the stages through which state coordination of higher education has passed. Prior to the early 1950s, individual institutions interacted directly with legislatures in all 10 of the case-study states. At that time higher education represented a small part of most state budgets, and input indicators represented a reasonable approximation of quality understood as resource availability.

In the post World War II period, the growth of the higher education enterprise raised concerns about efficiency and access and led to the establishment of coordinating boards. To the earlier input measures of resource-based quality, coordinating boards added output measures, since efficiency can only be assessed by examining outputs in relation to inputs.[10]

By 1984, state concerns began to focus on quality. The convergence of economic pressure and renewed attention to quality issues on the part of American business produced an uneasiness among state policymakers. New models aimed at reporting qualitative outcomes, such as the New Mexico Report Card, found ready acceptance.

Quality Definition Model

Current interest in quality improvement has produced a number of sophisticated definitions that afford opportunities for integrating state and institutional perspectives. The following five definitions are useful in assessing quality in state settings.[11]

1. ***Reputation or institutional ranking (transcendent quality)*** Those who attend institutions with the highest status are perceived to have attained better educations than the graduates of lesser institutions. This definition speaks more directly to resources than to performance. Transcendent quality includes the input indicators identified earlier in table 1.

TABLE 3

OUTCOME INDICATORS IDENTIFIED (I) OR ADOPTED (A) BY STATE

OUTCOME INDICATORS	CO	FL	IL	KY	NY*	SC	TN	TX	VA	WI**
Admission standards and measures of the first-year class against standards	A		I		I		A		I	
Accredited programs and programs eligible for accreditation			I	A		A	A			
Pass rates on professional licensure exams	A	A	I	A	I	A	A	A		A
Upper division undergraduate students participating in sponsored research programs						A				
Student assessment results			I		I				I	A
Student performance on nationally normed exams			I		I					A
Undergraduate students who have a small class or seminar experience									I	
Students who have some kind of summarizing experience (thesis, recital, comprehensive exam) in major									I	
Student, alumni, parents, clients, and employers satisfaction		A		A	I					A
Placement of graduates						A	A		I	A
Student course demand analysis		A		A						
Reporting & resolution of sexual harassment complaints										A
Faculty retention & development										A
Workplace safety										A

** Analysis limited to the SUNY system*

*** Analysis limited to The University of Wisconsin system*

2. ***Relationship between inputs and outputs (cost/benefit quality)*** Table 4 provides a listing of indicators that reflect cost/benefit quality. While most of these measures are used in state funding formulas, they rarely are considered by state policymakers as a measure of quality when defined as inputs. However, comparing and contrasting input and output indicators, especially when compared with system and institutional goals, provide valuable measures of quality and efficiency.

TABLE 4

INDICATORS OF COST/BENEFIT QUALITY

COST/BENEFIT QUALITY INDICATORS	STATES
Total degrees awarded by institution and discipline	FL, IL, KY, TN, WI
Total student credit hours produced by institution and discipline	FL, IL, KY, NY
Student transfers between two- and four-year institutions	IL, NY, SC, TN
Total contact hours of instruction by faculty rank, institution and course level (faculty workload)	FL, KY, NY
State appropriations per resident student	CO, NY, VA
State appropriations per capita	CO, NY, VA
Classroom and lab utilization	FL, IL, KY
Sustained financial commitment to instruction	CO, NY, WI
Average class size	IL, VA, WI
Time to degree and number of credits by institution and degree	FL, KY, WI
Average faculty salary	CO, IL
Alumni and private contributions	CO, NY
Student characteristics	IL, SC
Charges to students	IL, NY
Two-year transfer students completing four-year degrees	IL, KY
Student/faculty ratios	CO
Facilities maintenance	WI

3. ***Consistency of indicators matched with stated standards (process-based quality)*** The most common application of this definition occurs in accreditation. Indicators derived through the accreditation process are part of an institution's regular assessment practices and, therefore, require little oversight and have no added cost. Indicators derived from the accreditation process also help to guard against inappropriate comparisons that fail to consider differences in missions and resources. Table 5 provides a summary of the process-based quality indicators in use among the case-study states.

TABLE 5

INDICATORS OF PROCESS-BASED QUALITY

PROCESS-BASED QUALITY INDICATORS	STATES
Admission standards and measures of the first-year class against standards	CO, IL, NY, TN, VA
Number and percentage of accredited programs and programs eligible for accreditation	IL, KY, SC, TN
Availability of academic programs	CO, IL, NY
Faculty diversity	CO, NY, WI
Student course demand analysis	FL, KY
Availability of student financial aid	CO
Upper division undergraduate students participating in sponsored research programs	SC
Students who have some kind of summarizing experience (thesis, recital, comprehensive exam) in major	VA
Undergraduate students who have a small class or seminar experience	VA
Reporting & resolution of sexual harassment complaints	WI
Faculty retention & development	WI
Workplace safety	WI

4. ***Measurable attributes of graduates (product-based quality)*** Examples of this include performance on licensing exams or measures of general education competencies. One difficulty with interpreting these indicators is separating the effects attributable to the program from those caused by differences in entering-student characteristics. For instance, in one state pass-rates on a nursing licensing exam for graduates of some community colleges regularly exceed rates for baccalaureate graduates of four-year institutions. In part this is because there are large numbers of students enrolled at the community colleges who already hold baccalaureate degrees or who have substantial prior college experience. The most useful product-based measures, like their cost/benefit counterparts, pay attention to appropriate input measures. The product-based quality measures summarized for the case-study states in table 6 typically do not associate output measures with their corresponding inputs.

TABLE 6

INDICATORS OF PRODUCT-BASED QUALITY

PRODUCT-BASED QUALITY INDICATORS	STATES
Enrollment, progression, retention and graduation by race, gender, disability and high school achievement	CO, FL, IL, KY, NY, SC, TN, TX, VA, WI
Pass-rates on professional licensure exams	CO, FL, IL, KY, NY, SC, TN, TX, WI
External or sponsored research funds	CO, IL, KY, NY, TX, VA, WI
Students in remedial courses; students exiting remedial courses and completing entry-level courses.	KY, SC, TN, TX, VA
Lower division courses taught by full-time faculty, part-time faculty and graduate assistants	SC, TN, VA, WI
Placement of graduates	SC, TN, VA , WI
Student assessment results	IL, NY, VA, WI
Student performance on nationally normed exams	IL, NY, WI
Continuing education/extension enrollments and public service activities	IL, KY, WI
Course completion rates	NY, TX
National faculty and student awards	NY

5. ***Client satisfaction (user-based quality)*** Users in this case are not only alumni, students, and parents but also the business and professional community. User-based quality is at the core of the Total Quality Management movement. As indicated in table 7, the typical measure of user-based quality is satisfaction as reported on some type of survey.

TABLE 7

INDICATORS OF USER-BASED QUALITY

USER-BASED QUALITY INDICATORS	STATES
Student, alumni, parent, client, and employer satisfaction	FL, KY, NY, WI

Because this study focuses on state policy arrangements, the popularity of client satisfaction-surveys among the case-study states is likely understated. Process-based and user-based measures of quality are favored by institutions because of their compatibility with marketing strategies and with regional accreditation practices. These forms of quality indicators are less appealing to elected officials who prefer the more quantitatively oriented cost/benefit and product-based measures.

CHARACTERISTICS OF USEFUL INDICATORS

The categories presented in this paper are only two of several schemes for conceptualizing quality.[8] The input, output, and outcome terminology used by state policymakers is compatible with Alexander Astin's approach to assessment,[12] but it goes further by linking assessment to emerging state and institutional interests in assessment as a prerequisite to efficiency and improvement. D. T. Seymour[13] and Cornesky et. al.[14] offer helpful perspectives, but their approach is too tightly wedded to the institutional perspective to maintain satisfactory comfort levels among state policy officials. The advantage of the approaches presented here rests in the way indicators are used in planning or are linked to definitions of quality that drive current institutional practice. The two conceptual arrangements also help to clarify the basis for disagreements among state and institutional representatives on the appropriate indicators for assessing system and institutional performance.

Useful indicators of educational quality for those who form and those who implement policy must address at least three interrelated questions:

Where do quality indicators fit conceptually among the strategies used to define and implement state priorities? How will the results of assessment be used?

Conceptually, quality indicators can be seen as part of a strategic planning process through which states, in cooperation with institutions, define priorities for improvement and keep track of the results. They may also be seen as part of an effort to control costs and to assure product quality. By taking a planning and improvement perspective, each state can choose unique indicators in terms of its priorities at a given time. Emphasizing accountability leads to a greater number of common measures across states and over time.

Realistically, there is no way of limiting how quality indicators are used in formulating policy. Certainly they will be used to make incremental adjustments when institutional outcomes appear inconsistent with policy objectives. However, resisting the development of indicators because they might be misused is not a promising strategy. Higher education officials are in a stronger negotiating position when they define the indicators that serve implementation purposes and acknowledge the concerns of elected officials as well as those of institutional representatives.

What goals or objectives have been defined as priorities for a state system of higher education? For how long have they been pursued?

Each state defines its own priorities as part of an ongoing process to allocate the resources needed to promote the four core values of quality, equity, efficiency, and choice. States should select indicators that estimate progress toward the priorities they pursue over time. In this respect, indicators may be useful in identifying aspects of a system that require attention. Because of differences in the way state systems are organized, indicators should be collected in aggregate form for the system as well as for the institutions that comprise the system.

What criteria credibly measure progress toward the attainment of state goals and priorities? From whose perspective should they be assessed?

Different actors define quality in ways that emphasize their individual purposes and perspectives. Institutional actors emphasize process-based and user-based indicators. Governors and legislators are oriented more toward cost/benefit and product-based measures. As Seymour has pointed out, "higher education no longer has the luxury of using narrow definitions of quality." States need a variety of indicators to help them shape responsive systems of higher education.

CONCLUSION

Quality indicators appear most useful if integrated in a planning process designed to coordinate institutional efforts to attain state priorities. As this report has shown, case-study states have conceptualized their indicators in one of two approaches. In the first (summarized in tables 1–3), the indicators have been reported according to an input, output, and outcome typology. In the second (summarized in tables 4–7), the same indicators have been rearranged into cost/benefit, process-based, product-based, and user-based categories to help make the point that different users prefer different measures.

The continuum from strategic planning to accountability/improvement seems to capture the range of current state activity. Texas and Illinois are examples of the strategic planning approach. Wisconsin (which uses such categories as quality, effectiveness, efficiency, access, diversity, and stewardship of assets) and Colorado (which uses excellence, access and diversity, efficiency, and adequacy of resources) are examples of the accountability/improvement approach. States considering the adoption of quality indicators for monitoring a system of higher education would be well-advised to incorporate requirements for planning, institutional improvement, and accountability in their design, since all three must be addressed over time.

NOTES

1. C. Marshall, et.al., *Culture and Educational Policy in the American States* (New York: The Falmer Press, 1989).
2. L. M. McDonnell and R. F. Elmore, "Getting the Job Done: Alternative Policy Instruments," *Educational Evaluation and Policy Analysis*, vol. 9, no. 2, (1987).
3. Tennessee Higher Education Commission, *The Future of Tennessee: Higher Education* (1987–93).
4. Tennessee case-study, p. 83.
5. Tennessee case-study, p. 92.
6. Texas case-study, p. 101.
7. Governor's Office of Budget and Planning/Legislative Budget Board, *Planning for Texas Tomorrow: Instruction for Preparing and Submitting Agency's Strategic Plans for 1992–1998* (Austin, TX: January 1992).
8. *Texas Tomorrow*, p. 36.

9. D. Osborne and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* (New York: Penguin, 1992), p. 161.

10. See J. D. Millett, *Conflict in Higher Education* (San Francisco: Jossey-Bass, 1984).

11. See D. A. Garvin, *Managing Quality: The Strategic and Competitive Edge* (New York: The Free Press, 1988), and D. T. Seymour, *On Q: Causing Quality in Higher Education* (New York: ACE/Macmillan, 1992).

12. Alexander Astin suggests that input, process, and output categories are useful for organizing assessment indicators. See his studies, *Achieving Educational Excellence* (San Francisco: Jossey Bass, 1985) and *Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education* (New York: ACE/Macmillan, 1991).

13. See D. T. Seymour, *On Q: Causing Quality in Higher Education.*

14. R. Cornesky et. al. modify the Malcom Baldridge Award Categories to include leadership, information and analysis, planning for quality, human resource allocation, quality assurance of products and services, quality results, and customer satisfaction. See *Using Deming to Improve Quality in Colleges and Universities* (Madison, WI: Magna Publications, 1990).

DEVELOPING STATEWIDE PERFORMANCE INDICATORS FOR HIGHER EDUCATION: POLICY THEMES AND VARIATIONS

Peter T. Ewell

Performance indicators as tools for state higher education policy have many roots. Some can be traced directly to public higher education's new accountability-oriented climate, itself the product of increasingly harsh fiscal realities and growing public concerns about higher education costs. Some can be traced to the earlier development of state-based assessment efforts in the mid-1980s, intended to improve higher education's effectiveness by stimulating institutions to examine their own outcomes and operations. Others can be attributed to long-standing efforts on the part of a number of states to develop comprehensive planning systems for guiding the overall development of public higher education.

Whatever their origins, state-based higher education performance indicators are clearly a phenomenon.[1] Approximately one-third of states now have such indicators in place, the vast majority of which have been developed and implemented within the last three years. Based on the experiences of 10 case-study states, the purpose of this analysis is to examine this phenomenon descriptively, to attempt some early generalizations about its evolution and future potential, and to draw some conclusions about its implementation.

The first section of this analysis provides some general background for the development of performance indicators, including a brief review of earlier state-based assessment efforts and their growing limitations in the face of new policy demands. The second section provides an overall description of policy implementation in the 10 states, including an analysis of themes and experiences common to many. The third presents a systematic review of the various types of indicator currently being collected or proposed. The fourth and final section attempts some deeper analytical conclusions and suggests some broad lessons that can be drawn for other states. Hazarding generalizations from a rich variety of case-study material is always a risky business, necessary though it may be. Readers are strongly encouraged to review the case studies themselves and to draw their own conclusions.

BACKGROUND

The development of state-based performance indicators in higher education must be viewed against the backdrop of a decade-long process of policy evolution. Beginning in the early 1980s, state policy increasingly began to emphasize themes of return on investment as well as the linkage between higher education and the attainment of wider public goals such as work force preparation and the development of an educated citizenry.[2] In many states, academic concern about revitalizing the undergraduate curriculum coincided with policy interest in improving what was seen as an important but neglected aspect of higher education's responsibility.[3]

The policies that resulted emphasized the assessment of education outcomes but also involved the creation of a range of other mechanisms for inducing quality improvement in undergraduate education, often in the form of addition-to-base, incentive-funding mechanisms.[4] These policy tools were well suited to the state policy climate of the times, emphasizing curricular renewal and experimentation in the context of ample resources. The state-mandated assessment programs that emerged during this period strongly resembled one another in their desire to fuse in a single process the dual agendas of improving instruction at the institution level and demonstrating accountability on a statewide basis. At the same time, they tended to be implemented as add-ons to existing policy, often separately funded and rarely directly integrated into state-level planning and budgeting mechanisms.[5]

Such approaches generally allowed institutions maximum discretion in determining what and how to assess; at the same time, they assiduously avoided interinstitutional comparisons. Most required institutions to engage in assessment within broadly defined domains and to report their findings publicly. State-level review of reported results was viewed as much a means to providing institutions with feedback on their evolving assessment programs as it was a mechanism for ensuring compliance. Indeed, the policy objective of such efforts was consistent throughout: to create an ongoing, locally-owned process of continuous self-examination and improvement.

Led by states such as Virginia and Colorado, some two-thirds of the states had such institution centered programs in place by 1990.[6] But this approach always represented something of a gamble for state higher education leaders. If institutions could indeed field credible assessment methods quickly and could report actions taken as a result, then accountability demands could be met in large measure. But this decentralized improvement-oriented approach depended decisively on two conditions.[7] First, institutions had to implement credible local assessment programs promptly. By 1990, it was all too clear that institutional response was both lagging and uneven. Second, institutions had to find an effective way to communicate the results of assessment to outside audiences. Institution-centered reports were rich but diffuse, although they rarely allowed policymakers the opportunity to compare institutions or to examine overall system performance.

These drawbacks became increasingly salient in the harsh policy conditions of the early nineties. New fiscal realities meant that neither states nor institutions could continue to afford assessment as an add-on, and many simply ceased investing in the process. Simultaneously, tight times meant the reemergence of traditional public concerns about higher education's efficiency, embracing issues such as faculty workloads, program duplication, and investments in undergraduate teaching. This was brought to a head when funding shortfalls demanded that public officials make increasingly hard decisions about where and how to invest.

For these reasons, the conversation accompanying the recent emergence of performance indicators differs considerably from its counterpart around assessment some 10 years ago. For one thing, current debate has a considerably wider domain. While the emergence of state interest in assessment in the early 1980s signalled a new concern with quality as opposed to more traditional issues of access and efficiency, current initiatives embrace both. At the same time, a new "quality rhetoric" is apparent in the labels attached to many of these initiatives — *Priorities, Quality and Productivity* (PQP) in Illinois or *Academic Quality Program* (AQP) in Wisconsin, for instance — a vernacular that strongly reflects the growing influence of Total Quality Management concepts drawn from business and industry.

The actual array of statistical performance indicators emerging in many states thus mixes old and new elements, but in a conscious attempt to be comprehensive. Many efforts appear dominated by concerns about traditionally defined efficiency, but equally many — for example, South Carolina's requirement to report the number of undergraduate students participating in sponsored-research activities, or Virginia's and Wisconsin's proposals to examine the proportion of students engaging in particular types of curricular or classroom activities — reflect an emerging concern with explicit educational processes and delivery.

The inclusion of such domains suggests a new willingness to examine the actual production function of higher education. If this trend continues, and if it is more deliberately linked to planning and resource allocation as many states suggest, the result may be an unprecedented level of policy engagement in managing instructional delivery.

IMPLEMENTING INDICATORS

While many of the obstacles and issues faced by indicators resemble those encountered by earlier attempts to deploy assessment or program review initiatives, there are considerable differences.[8] Among the case-study states, for example, a number of themes have emerged that were not present in the earlier initiatives:

Quick implementation with little prior conceptual development

The majority of indicator proposals deployed in the case-study states arose extremely rapidly and rely heavily on existing information or readily available data. As a result, few have been guided by prior analysis of statistics that would identify those most appropriate for systemic decision making and public reporting. In many cases, rapid implementation was a direct consequence of the legislative source of the initiative. Kentucky's SB109 and South Carolina's Act 255 (as well as New Mexico's earlier report-card bill, upon which both were based) came quickly, primarily because the legislators responsible were in direct contact with one another — a pattern appropriately labeled "legislation by FAX." In other cases — Colorado's Scorecard initiative and Virginia's and New York's recent indicator proposals, for example — the initiative was developed rapidly by the coordinating or governing agency as a preemptive strike to anticipate and avoid expected legislative mandates.

In still others states, indicators came through the back door as a needed auxiliary to make other, more important initiatives work as expected. Texas' abortive performance-based aid program and its state-agency strategic-planning initiative both required performance data to operate. But initial systematic thinking about the needed indicators was largely overwhelmed by the sheer scale of these proposals and the consequent press of political events. Similarly, strengthened accountability measures in Wisconsin first arose as a necessary counterbalance offered by the UW system in return for greater budget flexibility. In neither case was time and opportunity available to develop indicators from conceptually sound first principles.

Illinois and Tennessee provide interesting exceptions to this pattern of breakneck implementation. Though different in many ways, initiatives evolved slowly in both states. The ancestry of the statistics and analytical procedures used in Illinois' PQP initiative, for example, can be traced back through a complex array of earlier program costing, planning, and evaluation efforts that stretch back to the mid-1980s. Similarly in Tennessee, the now annual *Tennessee Challenge 2000* report was first mandated by the legislature in 1989, and that state's higher education commission has taken the opportunity in each successive year to refine both the measures used and their manner of presentation. The fact that the state had already rehearsed such a program five years earlier in the form of legislatively-mandated performance measures also enhanced this base of experience.

A focus on interinstitutional comparison

The majority of institution-centered assessment requirements initiated by states in the mid-1980s assiduously avoided comparing institutional performance. With the primary policy focus placed on

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institutional improvement, the development of comparative performance statistics was seen as inappropriate at that time, and each institution was encouraged to develop approaches suited to its own unique mission and student clientele. But an equally compelling reason for this course of action was political. In virtually every state, institutions strongly resisted direct statistical comparisons, and states came to view the diversity of measures as a reasonable price to get the program started. In the 1990s, in stark contrast, the majority of current performance indicator initiatives are deliberately comparative. This is particularly so for those legislatively mandated as in South Carolina, Kentucky, and Texas. But it is equally the case for preemptive initiatives such as those in Colorado, Virginia, New York, and Wisconsin, states in which the higher education agency has up to now consciously avoided comparing institutions.

Where agencies have been allowed some discretion in setting policy regarding institutional comparison, they have also made a visible attempt to ensure that it is appropriate. In Colorado and Tennessee, for instance, only sectoral comparisons are provided (although in the case of Tennessee, the legislature recently extended the sectoral statistics to include reporting on each institution). In addition, the vast majority of initiatives distinguish two- from four-year institutions and often require different performance indicators for each. Several states also attempt to buffer the effects of direct comparison by providing additional textual commentary on the reported indicators and how they should (or should not) be interpreted. *Tennessee Challenge 2000* and the Wisconsin's *Consumer Profile* provide excellent examples of such public reporting. Both include explicit caveats on interpretation where statistically risky samples are reported or where knowledge of specific population characteristics is important for drawing a valid conclusion. Last year, along similar lines, South Carolina combined the comparative statistical reporting required by Act 255 with additional institutional commentary and data unique to each institution, generated as a result of the state's earlier institutional effectiveness mandate. Though too early to tell, this seems also the route planned by agency leaders in Virginia and New York.

Given considerable levels of institutional resistance to even the slightest suggestion of comparison, its strong presence in current policy initiatives is significant. Clearly, this shift is partly due to increasing pressures for familiar, easy-to-read public accountability reports. But comparative reporting has deeper consequences, as it also provides a potential means for states to make high-stakes decisions affecting institutions themselves.

Linkages to funding and resource allocation

Another prominent feature of the 1980s institution-centered assessment mandates was their deliberate avoidance of a linkage to funding. Though assessment policies in states like Colorado, Virginia, and South Carolina included strong budgetary sanctions for institutions that failed to comply, the actual results of assessment were not tied to funding. The prominent exception, of course, was Tennessee where, through performance funding, assessment results directly determined a portion of the allocation.

By contrast, a number of initiatives in case-study states now contain such a linkage. Perhaps the most prominent is Texas, where the legislature in 1992 considered performance-based aid for higher education with initial allocation levels set at 10 percent of the base. The expected implementation difficulties, together with strong political pressure, put this initiative on indefinite hold, but it illustrates the type of once-unthinkable proposal that is now quite fashionable in state policy circles. In other case-study states, the rhetoric of indicator development strongly suggests an eventual link to funding. In Wisconsin, for example, the 1993 report of the Task Force on Systemwide Accountability explicitly recommends that such a mechanism be developed; Kentucky's governor similarly stated last year that institutional performance as measured and reported through SB109 "should ultimately be rewarded through our funding system."

In the majority of case-study states, however, linkages to resources are indirect. Illinois' PQP initiative, for instance, has significant budgetary consequences for institutions, though its primary unit of analysis is academic programs rather than budget lines. In Colorado, parallel legislative initiatives include HB 1110, which requires a legislative set-aside to fund areas of special concern to the state. In states such as Virginia and New York, where higher education agencies have largely shaped the initiative, such linkages are generally more muted. Planning documents in both states suggest that indicators will be used to help identify areas of potential state investment, but they propose no direct ties between results and allocation. Indeed, based on its long experience with institution-centered assessment, Virginia agency leaders worry about potential distortions in data-reporting if institutions begin to directly associate high stakes outcomes with statistical performance.

K-12 connection

Early observers of 1980s state-based assessment programs noted the fact that pressures for higher education accountability often arose in the language of K-12, an idiom highly familiar to legislators and others outside higher education.[9] In most cases, higher education leaders were able to persuade legislators and board members that the profound differences between the two sectors necessitated distinctive approaches. As indicator initiatives evolved in many of the case-study states, however, a parallel dynamic occurred, and, this time, many of the programs retained a strong K-12 flavor. External authorities came to the discussion of indicators with strengthened perceptions that K-12 reform was working and an accompanying conviction that all of public education should be integrated within a far more proactive accountability and improvement framework.

Probably the strongest manifestation of this K-12 connection is in Kentucky, where radical and highly visible K-12 reform measures launched in 1990 have had an acknowledged influence on mandated higher education reporting. In other states, the connection is present but less obvious. In South Carolina, the linkage is long-term: the original 1988 Cutting Edge legislation that resulted in institution-centered assessment also mandated comprehensive K-12 reform; Act 255 was seen by many as bringing the two systems more fully in line with respect to accountability. Similarly in Tennessee, *Tennessee Challenge 2000* was launched as both a K-12 and a higher education initiative, and, since 1989, its associated reporting has required a joint report by the Tennessee Higher Education Commission (THEC) and the state's department of education. Significantly, however, the visible K-12 connection in case-study states has largely been confined to legislative initiatives. In states such as Virginia, New York, Illinois, and Wisconsin, where higher education agencies have been the major actors, this linkage is much less apparent.

Not taking "no" for an answer

In contrast to earlier assessment conversations, state authorities in case-study states have been far less willing this time around to be talked out of the specifics of proposed requirements when faced with initial (and often vociferous) protests from institutions. While institution-centered assessment mandates in the mid- to late-1980s in states such as Virginia, Colorado, and South Carolina involved considerable institutional input and were often substantially modified as a result, indicator proposals in most case-study states have been more strongly backed by state policymakers and, partly as a result, have been more often accepted by institutions as inevitable.

Probably the best illustration of this dynamic is in South Carolina. Here Cutting Edge legislation first raised the issue of effectiveness reporting in 1988. In developing the required initiative, however, the higher education agency worked closely with a specially created institutional advisory committee (the SCHEA Network) in negotiating a workable set of arrangements. When Act 255 passed four years later, institutions were surprised to find little sympathy for their input in the legislature; as one observer colorfully put it, "they were cut off at the knees." Much of the same pattern was apparent in Kentucky with SB109, although here the initial institution-centered alternative put forward by the coordinating board was not as far along as its South Carolina counterpart when the legislative mandate came down. Similarly in Colorado, where the initial highly intrusive requirements of HB1187 were gradually converted by the coordinating board into a workable institution-centered system, development of the preemptive Scorecard involved far less institutional input.[10] Also in Colorado — and in states like Wisconsin and Illinois — state policymakers had the substantial advantage of having already collected the data required, meaning that institutional approval was less needed.

Finally, institutions have been less ready to push the issue than they were five years ago. Many appear to have accepted stronger accountability measures as inevitable, or at least as the necessary price for retaining continued support and discretion in decision making. Others are far more preoccupied with responding to major funding shortfalls than with arguing about additional reporting. This is certainly not to say that institutions have been silent, particularly in states such as Illinois where initiatives like PQP involve real allocation decisions. But, in many ways, this exception illustrates the larger point: institutions prefer onerous statistical reporting to much more intrusive policy alternatives.

INDICATORS OF WHAT?

In the majority of case-study states, performance indicator initiatives contain many of the same elements despite their diverse origins. Most include some 15 to 20 distinct data items collected by the governing or coordinating board and reported in tabular form to facilitate public communication and to allow comparisons among institutions. This convergence in content is due more to circumstances than consensus: because only a small body of available state-level data is available and since there are limited technical possibilities for manipulating it, indicator initiatives often end up alike. But some of this congruence results from shared perceptions about the importance of particular pieces of information.

Indicators currently proposed or in use in the 10 case-study states are presented in table 1. Items included under *instructional inputs* are for the most part familiar and already collected. In Florida and Texas, statewide testing mandates cover this ground, while other states include admissions standards and additional measures of institutional selectivity. Reflecting earlier concerns about student preparation, a number of states require reporting on remedial activities and their effectiveness.

Items included under *instructional processes* and *use of resources* are a mixed bag of old and new. Many are traditional activity measures such as the distribution of credits by discipline and level. A new and suggestive theme is gauging faculty workload by breaking down instructional activity indicators by level or type of faculty associated with them. This reflects obvious concern with ensuring student access to senior faculty, especially in the lower division. Six of 10 case-study states contain such a measure explicitly, with an additional state suggesting interest. A similar though more diffuse concern is evident with small classes (Wisconsin and Virginia), and specific types of instructional experiences (e.g., seminars in Virginia, or student participation in sponsored research in South Carolina). Finally, traditional efficiency concerns are apparent in a new guise through a focus on persistence and time-to-degree issues; indicators of this type are included in 6 of 10 states.

Items presented under *instructional outcomes* reflect continuing interest in this topic. Most frequently noted are graduation/completion rates, the only type of indicator included by all 10 case-study states. Also evident are a variety of post-graduation statistics, including pass-rates on licensure examinations, job placement, and graduate satisfaction with instruction. Interestingly, few new cognitive measures appear to be currently on the table. ACT-COMP scores and major-field testing results in Tennessee, as well as CLAST scores in Florida, have been in place for many years; the only exception here is the proposed sophomore testing in Wisconsin using the ACT-CAAP examination.

The majority of items noted under the heading of *efficiency* and *productivity*, and *condition of the asset* are very traditional. The former consist primarily of standard efficiency and cost measures that have for the most part been collected by these states for over a decade. The latter contain familiar funding ratios and measures of externally sponsored research activities, as well as newer items that demonstrate growing concern about the ways institutions have reacted incrementally to recent funding shortfalls.

Items included under *diversity/access/equity* reflect both ongoing state-level concern with these topics and the ready availability of state-level data. Eight of ten states, for instance, report graduation and/or persistence statistics by race and gender, and almost as many explicitly monitor enrollment activity by ethnic group. Others broaden the diversity issue to include faculty statistics and affirmative action activities. But relatively few states address the question of access for all students. Only two, for instance, propose indicators related to overall participation rates or costs to attend.

Items included under *articulation/K-12 linkages* reflect particular concern that institutions of higher education pay more attention to the educational system as a whole. By far the most common measure is volume and performance of two-year college transfers at senior institutions. In three of five states including such indicators — Florida, Tennessee, and Texas — these were in place and reported previously. Explicit concerns about K-12 linkages are less directly apparent; only two states, for instance, mandate feedback to high schools.

The final heading, *relation to state needs*, reflects an emerging interest in examining higher education outputs and capacity in relation to state priorities. Only three states suggest such indicators at this point: Illinois, New York, and Wisconsin. Interestingly, these are also states in which the higher

TABLE 1: Analysis of State-Level Indicators in the Case-Study States

	INSTRUCTIONAL INPUTS	INSTRUCTIONAL PROCESSES/ USE OF RESOURCES	INSTRUCTIONAL OUTCOMES
COLORADO	o ACT/SAT scores of entering freshmen	o Availability of academic programs o Sustained financial commitment to instruction o Student/faculty ratios	o Graduation rates by ethnicity o Performance of graduates on licensure exams
FLORIDA	o Mandated basic skills testing	o Total credits produced by discipline o Total contact hours by faculty rank/level o Time to degree and number of credits required o Course demand analysis o Classroom utilization	o CLAST examination on basic skills o Total degrees awarded by discipline o Performance of graduates on licensure exams o Alumni/employer follow-up responses o Retention/graduation rates by ethnicity o Job placement rates for vocational students
ILLINOIS	o Student demand (PQP)	o Centrality of programs to mission (PQP) o Faculty workload o Time to degree	o Persistence and graduation rates o Follow-up of graduates o Success of graduates (PQP)
KENTUCKY	o Number of students in remediation	o Total credits produced by discipline o Total contact hours by faculty rank/level o Specific faculty workload measures o Time to degree and number of credits to complete o Course demand analysis o Classroom utilization	o Total degrees awarded by discipline o Graduate performance on licensure exams o Graduate/employer satisfaction o Persistence and graduation rates by ethnicity
NEW YORK	o Trends in admissions data, high school graduates, etc.	o Time to degree completion o Freshman-to-sophomore persistence o Percentage resources for undergraduate instruction o Class size by level	o Graduation/persistence rates o Graduate performance on licensing exams o Student perceptions of quality
S. CAROLINA	o Number and performance of remedial students	o Lower-division courses taught by faculty type o Upper-division students in sponsored research o Graduate students drawn from in-state	o Graduation/completion rates o Placement of graduates o Grad. performance on licensing exams
TENNESSEE	o Remedial students and effectiveness of remediation o ACT scores of entering students	o Graduation/completion rates o Lower-division courses taught by faculty type	o Grad. performance on licensing exams o ACT-COMP scores o Major field test scores o Student satisfaction ratings o Job placement rates for graduates
TEXAS	o TASP examination results	o Within-term persistence rates o First-year retention rates o Classroom utilization	o Graduation/completion within 6 years o Grad. performance on licensing exams
VIRGINIA	o Admissions standards and requirements o Number of students meeting admissions standards o High school courses taken o Levels of remediation required	o Average class sizes o Percent undergraduates taught by senior faculty o Small class/seminar experiences o "Capstone"/integrative experiences	o Graduation/completion rates o Employment/graduate school placement rates
WISCONSIN	o ACT/SAT Scores o Resident Students Accepted * o WI high school graduates enrolled *	o Average time to completion o Courses taught by faculty type/level o Average class size o Percent classes of 100 or more	o Numbers of degrees granted o Graduation/completion rates o Graduate satisfaction/outcomes * o ACT-CAAP Results *

* Indicators from the Governor's Task Force on UW Accountability Measures

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EFFICIENCY/ PRODUCTIVITY	CONDITION OF THE ASSET	DIVERSITY/ACCESS/EQUITY	ARTICULATION/ K-12 LINKAGES	RELATION TO STATE NEEDS
o Student/faculty ratios	o Total revenues per student o Alumni and private contributions o State approp. per resident student o State approp. per capita o Grant and contract dollars per FTE o Average faculty salary	o Graduation rates by ethnicity o Availability of student financial aid o Faculty diversity o College participation rate		
		o Retention/graduation rates by ethnicity	o Performance of transfers at senior institution	
o Program costs (PQP) o Faculty workload		o Various measures in individual reports	o Feedback on performance to high schools o Performance of transfers at senior institution	o Relation of program to employment needs (PQP)
	o Number/proportion of accredited programs	o Persistence and graduation rates by ethnicity	o Research and service in support of K-12 o Number and performance of two-year transfers	
o Credits per faculty produced o Student/faculty ratios	o Graduate program and faculty "quality" measures o Condition of campus facilities o External fundraising success	o Student demographics o Persistence/graduation by ethnicity o Ethnicity of faculty o Trends in "costs to attend"		o Graduates in science, engineering, etc. o Economic impact on state
	o Number/proportion of programs accredited	o Number and trends in minority enrollment	o Transfer rates and transfer performance	
	o Number/proportion of programs accredited	o Minority enrollments o Completion/graduation rates for minorities	o Two-year college transfer rates and performance	
	o Value of externally-sponsored research	o Minority first-year persistence o Minority performance on TASP	o Mandated feedback on peformance to high schools o Mandated feedback on performance to two-year colleges	
	o Quality of institutional assessment program o Level of sponsored research activity	o Graduation/completion rates by ethinicity		
o Sponsored resarch levels *	o Faculty recruitment/retention * o Faculty development resources * o Maintenance investments * o Accidents/injuries *	o Progress in affirmative action * o Minority graduation rates * o Sexual harrassment incidents *		o Employer ratings of "responsiveness" * o Continuing education activities *

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education agency has led the initiative and has proceeded in the context of a wider strategic-planning framework.

The overall weight of attention suggested by this array of indicators — despite the intent to be comprehensive — suggests a particular concern with instructional processes and outcomes at the undergraduate level. While not surprising, this conclusion is significant when coupled with the insistence with which such measures have been advanced by state authorities and with their common comparative focus and potential linkages to funding. In this sense, the center of gravity of state-level policy intent appears quite consistent with earlier undergraduate reform initiatives of the eighties including, quite prominently, assessment.

POLICY PATTERNS AND CONCLUSIONS

Table 2 provides an overview of the 10 case-study states with respect to the development of accountability and assessment policy. For each state, separate lines are shown for predominant initiatives in "institutional effectiveness" and in state indicator reporting. For Florida and Texas, the other line is included to address unique statewide student testing policies. Each initiative is then briefly described under a number of headings. The first three identify the initiative in terms of who, when, and what. Where a joint listing occurs in the *who initiated* column, the initiative was a collaborative effort among the parties noted. The *strategy* column briefly analyzes the intent of these initiatives, while the two linkage columns rate the degree to which each is tied to budget and to statewide planning efforts, respectively.

Inspection of the array of strategies across case-study states reveals an interesting variety. For institutional effectiveness initiatives, the **improvement strategy** suggests a primary intent to stimulate institutions to create their own local change processes by mandating an assessment process and publicly reporting its results. This theme is dominant in 6 of the 10 states. Tennessee's and Texas' **reward strategy** suggests a somewhat different approach, based principally upon the creation of concrete budgetary incentives for change. Exceptions to these common categories are Illinois' comprehensive approach that relies upon a range of state and institutional studies and inducements, and Florida's catch-up, indicating the late development of both institutional effectiveness and state indicator initiatives.

Table 2: A Comparative Overview of Ten State Initiatives

	Who Initiatiated?	When Initiated?	Initiative	"Strategy"	Link to Budget	Link to Planning
COLORADO						
"Institutional Effectiveness"	Legislature	1985	HB1187	Improvement	Sanction	Low
State Indicators	SHEEO	1991	"Score Card"	"Pre-emptive"	Low	Low
FLORIDA						
"Institutional Effectiveness"	Legislature	1991	PEPC Study	"Catch-up"	Unknown	Unknown
State Indicators	Legislature	1991	"Accountability Report"	"Catch-up"	Unknown	Unknown
Other	Legislature	1979	CLAST	Gatekeeping	Low	Low
ILLINOIS						
"Institutional Effectiveness"	SHEEO	1986	Undergrad study	Comprehensive	Moderate	High
State Indicators	SHEEO	1991	PQP	"Realignment"	Moderate	Moderate
KENTUCKY						
"Institutional Effectiveness"	SHEEO	1990	KAEP	Improvement	Low	Low
State Indicators	Legislature	1992	SB109	"Standards"	Low/planned	Low
NEW YORK						
"Institutional Effectiveness"	System	1987	Assessment	Improvement	None	Low
State Indicators	System	1993	"Indicators"	"Budget Bargain"	Low	Low/planned
SOUTH CAROLINA						
"Institutional Effectiveness"	Legislature	1988	"Cutting Edge"	Improvement	Sanctions	Low
State Indicators	Legislature	1992	Act 255	"Standards"	Low	Low
TENNESSEE						
"Institutional Effectiveness"	SHEEO	1979	Performance Funding	Rewards	High	Moderate
State Indicators	Legislature/ SHEEO	1989	TN2000	"Standards"	Low	Moderate
TEXAS						
"Institutional Effectiveness"	------------	-----	---------------	--------------	--------------	--------------
State Indicators	Legislature	1992	Performance Aid	Rewards	High	Low/planned
Other	SHEEO/ Legislature	1987	TASP	Gatekeeping	Moderate	Low
VIRGINIA						
"Institutional Effectiveness"	SHEEO	1986	Assessment	Improvement	Sanctions	Moderate
State Indicators	SHEEO	1993	[Indicators]	"Pre-emptive"	Unknown	Unknown
WISCONSIN						
"Institutional Effectiveness"	Gov/SHEEO	1987	AQP	Improvement	Low	Low
State Indicators	Blue Ribbon/ SHEEO	1992	System Accountability	"Budget Bargain"	Low/planned	Low/planned

For state indicator initiatives, the **preemptive strategy** suggests an attempt by the state agency to take the lead in developing policy to head off or anticipate legislative action. This strategy is predominantly present in Virginia and New York — both states in which higher education authorities have been granted substantial latitude to develop policy, but where there is growing accountability pressure. The **standards strategy** suggests an attempt to use publicly-reported statistical indicators as a direct lever for institutional change, much as these states have previously used achievement standards in K-12. States exhibiting this strategy are all southeastern (Kentucky, South Carolina, and Tennessee), and the majority of initiatives are legislatively mandated.

The **budget-bargain strategy**, in turn, suggests a policy intent to trade additional accountability measures for more resources or for increased budget flexibility. This strategy is strongly apparent in New York and Wisconsin, both large and centralized statewide systems attempting to purchase greater autonomy. Arguably, Tennessee could be put in this category as well, as *Tennessee Challenge 2000* is seen by state higher education agency leaders as an important budget leveraging device.

Finally, Illinois' **realignment strategy** once more appears unique: PQP involves the complex use of indicator data, together with other information, as part of a more comprehensive attempt to restructure the state's program inventory and to align instructional-delivery processes to meet new environmental conditions.

The relations of these initiatives to budgeting and statewide planning efforts are similarly varied. Most linkages to resource allocation are low and indirect, with some interesting exceptions. **Sanctions are** used when an institution's failure to report data required under institutional effectiveness policies has potential budget consequences, a feature present in Colorado, South Carolina, and Virginia. In Texas and Tennessee, of course, performance funding yields strong budgetary ties (note that in Texas, TASP results are already used to help allocate remedial dollars to institutions). Illinois' initiatives similarly rate a moderate classification because of the anticipated effects of program inventory reduction and realignment efforts.

Most linkages to statewide planning appear similarly modest at this point. Tennessee and Virginia show greater-than-average connections, but largely because assessment results are included in statewide planning documents for reporting. There is little evidence to date that either state has prominently used reported data to help determine statewide priorities or otherwise to shape the actual content of planning recommendations. Again, Illinois appears an exception, as indicator initiatives are firmly embedded in a wider strategic planning context with a considerable history. Inspection of table 2 also reveals some overall clusters of state policy experience with respect to assessment and accountability. The first pattern can be appropriately termed the **one-two response** and is strongly present in Colorado, South Carolina, Kentucky, Virginia, and, to some degree, New York. Under this pattern, institution-centered assessment programs were in place and operating by 1990. But escalating pressures for accountability not addressed by such an approach resulted in a more recent additional state-indicator approach imposed by legislation or launched preemptively by the state higher education agency.

The second pattern, one shared by Tennessee and Wisconsin, is the **parallel strategy**. This means that both institutional effectiveness and state indicator initiatives have developed over a fairly extensive time period, with a predominant state policy focus of trading greater accountability for increased budgetary allocation and authority. To some extent, New York also fits this pattern, particularly with respect to the implied budget bargain.

The third pattern, exhibited by Florida and Texas, is the **strategy of statewide testing**. In both cases the very existence of such programs appears to have diverted the kinds of assessment and accountability conversations occurring in other states. As a result, when these issues eventually did arise, little had been done in either arena.

Finally, as noted, Illinois appears to have engaged in a **policy development strategy**. Illinois is distinct from other case-study states: the state has explicitly avoided separate development of either an institutional effectiveness or an indicator initiative. Instead, it has incorporated aspects of both into a more comprehensive set of planning, review, and action initiatives. Certainly, this path of development has resulted in a more coherent policy approach than in other states. Whether it has allowed the state's higher education system to meet growing demands for accountability in an effective manner remains to be seen.

Review of case-study materials suggests a number of additional policy conclusions that other states may find interesting. Among the most salient are the following:

- **The need to recognize a growing divergence between the agendas of improving institutional effectiveness and of achieving public accountability**

State assessment mandates of the mid-1980s were typically advanced and implemented under the dual banner of accountability and institutional improvement. In designing institution-centered assessment initiatives, state officials were aware of the tension between these two objectives, but they were hopeful that a positive institutional response (and the ability to demonstrate it to legislative authorities) would effectively discharge accountability obligations. For a variety of reasons already noted, this did not happen. As a result, the experiences of case-study states have increasingly sustained the proposition that local improvement and accountability are different agendas that cannot be adequately addressed through a single policy process.

The principal evidence for this contention is the dominance of the one-two response pattern noted above, a pattern based on the growing inability of institution-centered assessment initiatives to deliver the goods on accountability. Interview data drawn from case-study states strongly confirm this contention. In Virginia, state officials readily admit the growing need for both kinds of processes. Counterparts in Wisconsin emphasize the breakthrough in thinking that occurred when concepts of assessment and accountability, previously considered almost automatically interchangeable were separated. In Florida, after the Postsecondary Education Planning Commission (PEPC) was able to use a late start to examine the experiences of other states, it also proposed a dual-track process involving a combination of locally-centered improvement efforts and statewide accountability measures. An agency staff member in Kentucky made the overall point well: "You can miss the point and get real fuzzy if you try to do everything together."

- **The growing importance of the "budget-bargain"**

More than simply satisfying increasing demands for public reporting, the experiences of the case-study states suggest the utility of explicitly trading strengthened accountability measures for additional budgetary benefits. Some aspects of this budget-bargain have already been mentioned. In Wisconsin, for instance, the entire indicators conversation grew out of the deliberations of the Blue Ribbon Commission on University Compensation, one of whose conclusions was that increased budgetary autonomy might help university administrators manage more effectively for the future. But the commission also believed that such freedom ought not to be granted without additional assurances that higher education would act responsibly, and it recommended that additional accountability measures be studied as well. New York's experience, as noted, was similar. Here, however, higher education officials themselves took the initiative in proposing performance indicators, hoping that this action would help smooth the way for legislative approval of far more important proposals about budget flexibility within the SUNY system.

Tennessee's experience provides an additional illustration of this bargain, but in a different direction. Here performance funding has always been viewed by state higher education officials as being at least as important in leveraging budget as in inducing institutions to improve delivery.[11] Data generated through the process, and additionally through 1984 legislative benchmarking requirements and *Tennessee Challenge 2000*, have been seen as particularly valuable in making higher education's case to the legislature, especially when most other competitors for funding can routinely present information about results. It is claimed that the evidence for the success of this approach lies in the fact that Tennessee higher education has maintained its share of available state dollars in comparison with other agencies and functions, a pattern that is rare elsewhere.

- **The importance of a conceptual framework and a link to action**

As noted, the majority of indicator proposals in case-study states were developed quickly, either as political initiatives or in anticipation of them. Hence the need to act quickly limited the domain of these proposals to information already available or easily collected. In few cases was there the leisure to develop indicators from first principles, either in terms of a conceptual framework of important policy questions or an explicit analysis of constituency interests and demands. This is not to say that states were unaware of the desirability of doing so. Indeed, in many cases, state agencies consciously attempted to group indicators into analytical categories or to make sense of what would otherwise have been a laundry list. In Colorado, for instance, indicators included in the Scorecard have been organized under four common educational values: excellence, access, efficiency, and adequate resources. Similarly, Wisconsin's task force recommendations suggested the development of indicators around key areas of quality, effectiveness, efficiency, access, diversity, stewardship of assets, and contribution to compelling state needs.

Examining the broader linkage between indicators and planning in case-study states, it is apparent that state leaders have conceived of performance measures more often as mechanisms for tracking progress rather than as a means to help actively identify areas of need or priorities for planning. One clearly expressed motive for the passage of Kentucky's SB109, for instance, was "to monitor achievement" of the state's strategic plan, an attempt also made in South Carolina with a newly developed report combining Act 255 and Institutional Effectiveness results. In Virginia, moreover, the primary mechanism for public reporting of the results of institutional assessment has been through the biennial *Virginia Plan for Higher Education*, which also contains proposed initiatives for the next biennium. Probably the most sophisticated connection is in Tennessee, where indicator statistics mandated through *Tennessee Challenge 2000* and derived from performance funding are presented annually in the form of a planning update that ties statistics to specific planning objectives and an associated budget request. On balance, policymakers in each of these states have had more success in using indicators to document goal achievement than to help make hard decisions or to plan for the future.

- **The importance of time and of policy consistency**

Another prominent lesson from the experience of case-study states is the considerable benefit of time. Those states with long-standing accountability initiatives or a clear tradition of state planning and reporting appear to have evolved far more useful approaches than those lacking these advantages. Tennessee and Illinois provide excellent illustrations, though they have engaged in very different policy efforts. In Tennessee, the decade-long development of performance funding, combined with a considerable fund of state experience with performance indicators dating back to 1984, gave policy leaders and institutions time to get used to operating in a statistical environment and provided ample opportunities to evolve sophisticated accountability reports for outside audiences. In Illinois, moreover, statewide planning and review efforts by the board of higher education reach back to the mid-1970s and have gradually evolved to encompass the kinds of statistical measures enacted de novo in other states. The experience of both states demonstrates the utility of a consistent long-term policy agenda of which indicators are a part.

Flexibility and sheer passage of time are also important. Wisconsin's current accountability initiatives, for example, began as far back as 1986 with a statewide testing proposal. Rather than completely abandon this proposal as other states did at that time, state officials kept their options open as they simultaneously pursued more institution-centered alternatives and additional statistical indicators. Time and consistency, of course, are luxuries enjoyed only by agencies already allowed substantial policy discretion. In South Carolina and Kentucky, and to some extent in Colorado and Florida, higher education policy leaders were compelled to react to externally developed proposals on a short time frame, precisely because existing political conditions had rendered them largely unable to create an adequate conceptual foundation and a more rational policy approach.

- **The importance of an explicit communications strategy**

The experience of case-study states also suggests that meeting growing accountability demands requires more than just developing and implementing indicators. State officials must also think through carefully some specific mechanisms for communicating performance statistics to particular audiences.

As noted previously, the most frequent format for communicating results is a general purpose report that integrates performance information with other descriptive and contextual material. Prominent examples are *Tennessee Challenge 2000*, South Carolina's new combined Act 255/*Institutional Effectiveness* report, and the *Virginia Plan for Higher Education*. But case-study states also exhibit a variety of additional reporting mechanisms tailored for specific audiences. In Wisconsin, for example, statistical performance indicators on instructional processes and outcomes were first introduced in the form of a profile, included with descriptions of the university system campuses in materials distributed to prospective students. Similarly, Illinois briefly pursued a set of campus-specific consumer reports as part of its comprehensive array of accountability efforts; in this case, rather than being produced centrally in a comparative format, individual institutions were free to develop their own documents for distribution to local constituents and the wider public.

Whatever their quality, complex analytical documents based on institution-level data sources are unlikely to be sufficient to meet growing accountability demands. Some means will have to be found to communicate the big picture efficiently to unschooled audiences, despite inevitable distortions and misinterpretations.

CONCLUSION

Underlying all of these conclusions is a single message for state policy leaders: to be effective, indicators must be seen as a tool to shape the future, not a collection of statistics to report the past. Without a clear framework for interpretation and a wider state strategy for change, statistical indicators may help states solve a short-term accountability problem, but they will be unlikely to assist higher education policy leaders in accomplishing the increasingly urgent tasks of realignment and priority-setting. Though pioneers in many respects, few case-study states have as yet been able to accomplish this transition. This has been largely because higher education leadership has been unable, on its own, to develop a clear state consensus on policies and priorities. As a result, the question of what kinds of data and performance measures are appropriate to guide future development has not been systematically addressed. Well beyond the technology of indicators themselves, this is a task requiring systematic attention on the part of all state-level stakeholders, not just those few charged with responsibility for higher education.

NOTES

1. See Grady Bogue, Joseph Creech, and John Folger, *Assessing Quality in Higher Education: Policy Actions in the SREB States* (Atlanta, GA: Southern Regional Education Board, 1993).

2. See John Folger and Robert O. Berdahl, *Patterns in Evaluating State Higher Education Systems: Making a Virtue Out of Necessity* (College Park, MD: National Center for Postsecondary Governance and Finance, University of Maryland, 1987).

3. See Education Commission of the States, *Transforming the State Role in Undergraduate Education: Time for a Different View*; Report of the Working Party on Effective Action to Improve Undergraduate Education (Denver: ECS, 1986).

4. These are discussed in Peter T. Ewell, *Levers for Change: The Role of State Government in Improving the Quality of Undergraduate Education* (Denver: ECS, 1985) and Robert O. Berdahl and Susan M. Studds, *The Tension of Excellence and Equity* (College Park, MD: National Center for Postsecondary Governance and Finance, University of Maryland, 1989).

5. Peter T. Ewell and Carol M. Boyer, "Acting Out State-Mandated Assessment: Evidence from Five States," *Change*, vol. 20, no. 4 (1988).

6. See Peter T. Ewell et. al., "Filling in the Mosaic: The Emerging Pattern of State-Based Assessment," *AAHE Bulletin* (April 1990).

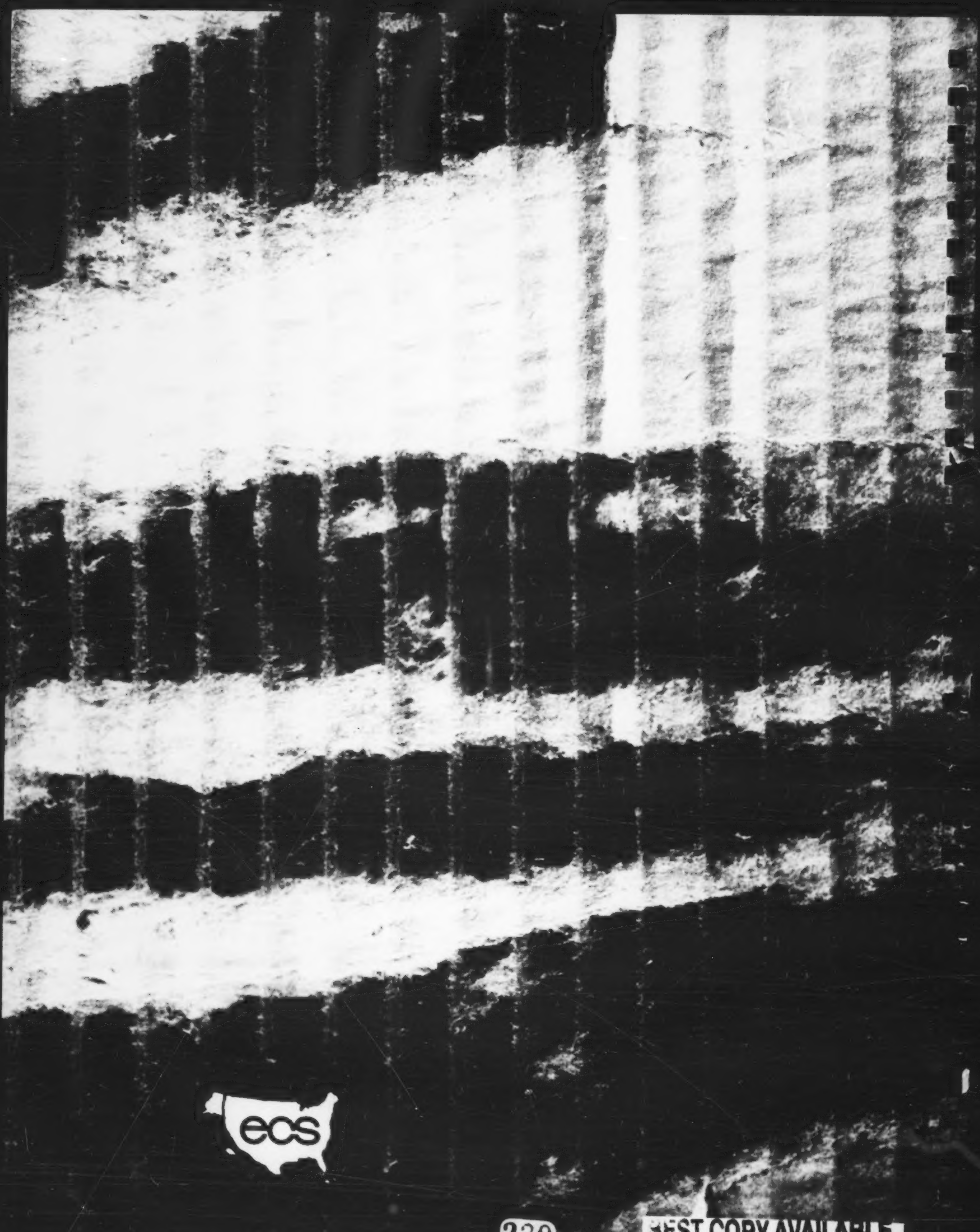
7. Peter T. Ewell, "Assessment and Public Accountability: Back to the Future," *Change*, vol. 23, no. 6 (1991).

8. See Ewell and Boyer, "Acting Out State-Mandated Assessment" and Christine P. Paulson, *State Initiatives in Assessment and Outcomes Measurement: Tools for Teaching and Learning in the 1990s* (Denver: ECS, 1990).

9. See Ewell and Boyer, "Acting Out State-Mandated Assessment."

10. See Stephanie Cunningham, "Implementing an Accountability Statute," paper presented at the AAHE Assessment and Continuous Quality Improvement Conference, June 9–12, 1993.

11. Peter T. Ewell, *Assessment and the "New Accountability": A Challenge for Higher Education's Leadership* (Denver: ECS, 1990).



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